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THE

WORKS

OF

FRANCIS BACON,

Lord Chancellor of England.

WITH A LIFE OF THE AUTHOR

BY

BASIL MONTAGU, ESQUIRE.

IN THREE VOLUMES.

VOL. II.

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CONTENTS OF VOL. II.

Page

SYLVA SYLVARUM; OR A NATURAL HISTORY.

CENTURY I.

Of straining or percolation, outward and inward 7
Of motion upon pressure 8
Of separations of bodies liquid by weight .. 8
Of infusions in water and air 9
Of the appetite of continuation in liquids .. 10
Of artificial springs 10
Of the venomous quality of man's flesh 10
Of turning air into water 10
Of helping or altering the shape of the body. 11
Of condensing of air, to yield weight or nourishment 11
Of flame and air commixed 11
Of the secret nature of flame 12
Of flame, in the midst, and on the sides 12
Of motion of gravity 12
Of contraction of bodies in bulk 13
Of making vines more fruitful 13
Of the several operations of purging medicines 13
Of meats and drinks most nourishing 14
Of medicines applied in order 17
Of cure by custom 17
Of cure by excess 17
Of cure by motion of consent 17
Of cure of diseases contrary to predisposition 17
Of preparation before and after purging 18
Of stanching blood 18
Of change of aliments and medicines 18
Of diets. 18
Of production of cold 18
Of turning air into water 19
Of induration of bodies 20
Of preying of air upon water 21
Of the force of union 22
Of making feathers and hairs of divers colours 22
Of nourishment of young creatures in the egg, or womb 22
Of sympathy and antipathy 22
Of the spirits or pneumaticals in bodies 23
Of the power of heat 23
Of impossibility of annihilation 24

CENTURY II.

Of music 24
Of the nullity and entity of sounds 26
Of production, conservation, and delation of sounds 28
Of magnitude, exility, and damps of sounds 29
Of loudness and softness of sounds 32
Of communication of sounds 32
Of equality and inequality of sounds 32
Of more treble and base tones 33
Of proportion of treble and base 34
Of exterior and interior sounds 34
Of articulation of sounds 35

CENTURY III.

Of the lines in which sounds move 36
Of the lasting and perishing of sounds 36
Of the passage in interception of sounds ... 37
Of the medium of sounds 37
Of the figures of bodies yielding sounds 38
Of mixtures of sounds 38
Of melioration of sounds 39
Of imitation of sounds 39
Of reflection of sounds 40
Of consent and dissent between audibles and visibles 41, 42
Of sympathy and antipathy of sounds 43
Of hindering or helping of hearing 44
Of the spiritual and fine nature of sounds .. 44
Of orient colours in dissolutions of metals .. 45
Of prolongation of life 45
Of the appetite of union in bodies 45
Of the like operations of heat and time 45
Of the differing operations of fire and time .. 45
Of motions by imitation 45
Of infectious diseases 46

Page
Of the incorporation of powders and liquors 47
Of exercise of the body, and the benefits or evils thereof 46
Of meats soon glutting, or not glutting 46

Century IV.

Of clarification of liquors and the acceleration thereof 47
Of maturation, and the accelerating thereof; and of the maturation of drinks and fruits 48
Of making gold 49
Of the several natures of gold..... 50
Of inducing and accelerating putrefaction .. 50
Of prohibiting and preventing putrefaction.. 51
Of rotten wood shining 52
Of acceleration of birth 53
Of acceleration of growth and stature..... 53
Of bodies sulphureous and mercurial 53
Of the chameleon 54
Of subterrany fires 54
Of nitrous water 54
Of congealing of air 54
Of congealing of water into crystal..... 54
Of preserving the smell and colour in rose leaves..... 55
Of the lasting of flame..... 55
Of infusions or burials of divers bodies in earth 56
Of the effects on men's bodies from several winds 57
Of winter and summer sicknesses 57
Of pestilential years 57
Of epidemical diseases 57
Of preservation of liquors in wells, or deep vaults 57
Of stutting 57
Of sweet smells 58
Of the goodness and choice of waters..... 58
Of temperate heats under the equinoctial... 59
Of the coloration of black and tawny Moors. 59
Of motion after the instant of death..... 59

Century V.

Of accelerating or hastening forward germination..... 60
Of retarding or putting back germination .. 61
Of meliorating, or making better, fruits and plants 62
Of compound fruits and flowers..... 66
Of sympathy and antipathy of plants 67
Of making herbs and fruits medicinal 69

Century VI.

Of curiosities about fruits and plants..... 70
Of the degenerating of plants, and of their transmutation one into another 72
Of the procevity and lowness of plants, and of artificial dwarfing them 73
Of the rudiments of plants, and of the excrescences of plants, or super-plants 74
Of producing perfect plants without seed... 76
Of foreign plants 77
Of the seasons of several plants 77
Of the lasting of plants 78
Of several figures of plants 78
Of some principal differences in plants 79
Of all manner of composts and helps for ground 79

Century VII.

Of the affinities and differences between plants and bodies inanimate 81
Of affinities and differences between plants and living creatures, and of the confiners and participles of both 81
Of plants, experiments promiscuous..... 82
Of the healing of wounds 89
Of fat diffused in flesh..... 89
Of ripening drink speedily..... 89
Of pilosity and plumage..... 89
Of the quickness of motion in birds..... 90
Of the clearness of the sea, the north wind blowing 90
Of the different heats of fire and boiling water..... 90
Of the qualifications of heat by moisture ... 90
Of yawning 90
Of the hiccough 90
Of sneezing 90
Of the tenderness of the teeth 91
Of the tongue 91
Of the mouth out of taste 91
Of some prognostics of pestilential seasons.. 91
Of special simples for medicines 91
Of Venus 91
Of the insects, or creatures bred of putrefaction 92
Of leaping 93
Of the pleasures and displeasures of hearing, and of the other senses..... 93

Century VIII.

Of veins of earth medicinal..... 94
Of sponges 94
Of sea-fish in fresh waters..... 94
Of attraction by similitude of substance.... 94
Of certain drinks in Turkey 94
Of sweat..... 95

Page
Of the glow-worm 95
Of the impressions upon the body from several passions of the mind 95
Of drunkenness 97
Of the hurt or help of wine, taken moderately 98
Of caterpillars 98
Of the flies cantharides 98
Of lassitude 98
Of casting of the skin, and shell, in some creatures 98
Of the postures of the body 99
Of pestilential years 99
Of some prognostics of hard winters 99
Of certain medicines that condense and rarefy the spirits 99
Of paintings of the body 99
Of the use of bathing and anointing 99
Of chambletting of paper 100
Of cuttle ink 100
Of earth increasing in weight 100
Of sleep 100
Of teeth and hard substances in the bodies of living creatures 100
Of the generation, and bearing of living creatures in the womb 101
Of species visible 102
Of impulsion and percussion 103
Of titillation 103
Of scarcity of rain in Egypt 103
Of clarification 103
Of plants without leaves 103
Of the materials of glass 104
Of prohibition of putrefaction, and the long conservation of bodies 104
Of abundance of nitre in certain sea-shores. 104
Of bodies borne up by water 104
Of fuel consuming little or nothing 104
Of cheap fuel 105
Of gathering of wind for freshness 105
Of trials of air 105
Of increasing milk in milch beasts 105
Of sand of the nature of glass 105
Of the growth of coral 105
Of the gathering of manna 105
Of the correcting of wines 106
Of bitumen, one of the materials of wild-fire 106
Of plaster growing as hard as marble 106
Of the cure of ulcers and hurts 106
Of the healthfulness or unhealthfulness of southern wind 106
Of wounds made with brass, and with iron. 106
Of mortification by cold 106
Of weight 106
Of supernatation of bodies 107
Of the flying of unequal bodies in the air .. 107
Of water, that it may be the medium of sounds 107
Of the flight of the spirits upon odious objects 107
Of the super-reflection of echoes 107
Of the force of the imagination imitating that the senses 107
Of preservation of bodies 108
Of the growth or multiplying of metals 108
Of the drowning the more base metal in the more precious 108
Of fixation of bodies 108
Of the restless nature of things in themselves, and their desire to change 108

Century IX.

Of perception in bodies insensible, tending to natural divination or subtile trials 109
Of the nature of appetite in the stomach ... 112
Of sweetness of odour from the rainbow ... 112
Of sweet smells 112
Of the corporeal substance of smells 112
Of fetid and fragrant odours 112
Of the causes of putrefaction 113
Of bodies imperfectly mixed 113
Of concoction and crudity 113
Of alterations, which may be called majors . 114
Of bodies liquefiable, and not liquefiable 114
Of bodies fragile and tough 114
Of the two kinds of pneumaticals in bodies . 115
Of concretion and dissolution of bodies 115
Of bodies hard and soft 115
Of ductile and tensile 115
Of several passions of matter, and characters of bodies 115
Of induration by sympathy 116
Of honey and sugar 116
Of the finer sort of base metals 116
Of certain cements and quarries 117
Of the altering of colours in hairs and feathers 116
Of the difference of living creatures, male and female 117
Of the comparative magnitude of living creatures 117
Of producing fruit without core or stone ... 117
Of the melioration of tobacco 117
Of several heats working the same effects .. 118
Of swelling and dilatation in boiling 118
Of the dulcoration of fruits 118
Of flesh edible and not edible 118
Of the salamander 118
Of the contrary operations of time on fruits and liquors 119
Of blows and bruises 119
Of the orrice root 119

Page
Of the compression of liquors 119
Of the nature of air..... 119
Of the working of water upon air contiguous 119
Of the eyes and sight..... 119
Of the colour of the sea or other water..... 120
Of shell-fish 120
Of the right side and the left 121
Of frictions..... 121
Of globes appearing flat at distance..... 121
Of shadows 121
Of the rolling and breaking of the seas..... 121
Of the dulcoration of salt-water 121
Of the return of saltness in pits upon the sea-shore 121
Of attraction by similitude of substance 121
Of attraction 121
Of heat under earth 122
Of flying in the air..... 122
Of the scarlet dye..... 122
Of maleficiating..... 122
Of the rise of water by means of flame..... 122
Of the influences of the moon..... 122
Of vinegar 123
Of creatures that sleep all winter..... 123
Of the generating of creatures by copulation, and by putrefaction 123

CENTURY X.

Of the transmission and influx of immateriate virtues, and the force of imagination.. 124
Of the transmission of spirits, and the force of imagination 124
Of the emission of spirits in vapour, or exhalation, odour-like 126
Of emission of spiritual species which affect the senses 128
Of emissions of immateriate virtues, from the minds and spirits of men, by affections, imagination, or other impressions..... 129
Of the secret virtue of sympathy and antipathy..... 129
Of secret virtues and proprieties 136
Of the general sympathy of men's spirits ... 137

TRACTS RELATING TO SCOTLAND.

A discourse of the happy union..... 138
Articles touching the union 142
Certificate of the commissioners..... 149
Naturalization of the Scottish nation..... 150
Union of laws..... 158
Proposition towards the union of laws..... 160
The post-nati..... 166

TRACTS RELATING TO IRELAND.

Considerations touching the plantation..... 183
Letter to Mr. Secretary Cecil..... 187
Considerations touching the queen's service in Ireland 188
Letters to Sir Geo. Villiers 190

TRACTS RELATING TO SPAIN.

Report of the Spanish grievances 193
Notes of a speech concerning a war with Spain 199
Considerations touching a war with Spain . 201
Miscellaneous tracts 214
Report of Lopez's treason 216

TRACTS RELATING TO ENGLAND.

Of the true greatness of Britain..... 222
Proposition touching the amendment of the laws 229
Offer of digest of the laws..... 233
Certificate touching the penal laws..... 236
Advice touching the charter-house 239
Observations on a libel..... 242

SPEECHES.

Touching purveyors..... 266
About undertakers 269
To the king upon the grievances of the Commons..... 272
On wards and tenures..... 273
Declaration for the master of the wards.... 274
On receiving the king's messages 276
Concerning impositions on merchandises... 278
To grant supplies to the king..... 281
Relating to the mint 282
To the speaker's excuse..... 284
On the motion of a subsidy 286

CHARGES.

Commission for the verge..... 289
Of subordinate magistrates 291
Against duels..... 295
Decree of Star-Chamber against duels..... 300
Against Mr. Oliver St. John..... 303
Mr. Lumsden, &c. 307
Lord Sanquhar..... 311
Mr. Owen..... 313
Countess of Somerset.....315, 319
Earl of Somerset 321
Letter to the king..... 326
To Sir G. Villiers..... 326
To the king 328
To Sir G. Villiers..... 330
Of Somerset's arraignment 330
To the king, about Somerset's examination..... 331
To Sir G. Villiers, about Lady Somerset's pardon.. 331
William Talbot 389

Page

PAPERS RELATING TO THE EARL OF ESSEX.

Apology of Sir Francis Bacon..... 333
The proceedings of the Earl of Essex..... 342
Declarations of his treasons..... 348
Arraignment of Blunt, Davis, &c..... 363
of Cuffe..... 365
of Merrick..... 365
Confession of Lee..... 365
of Knowd..... 366
of Gorge..... 367
of Sir J. Davis..... 368
of Sir C. Davers..... 368, 369
of Sir C. Blunt..... 369, 372
of Lord Sandys..... 371
of the Earl of Essex..... 374
Declaration of Sir William Warren..... 366
of Thomas Wood..... 366
of David Hethrington..... 366
of the Lord Keeper..... 370
Examination of Lord Rutland..... 371
of Lord Cromwell..... 372
of Lord Southampton..... 373
Speech of Sir Christopher Blunt..... 373
Advice to Sir George Villiers..... 375

HEOLOGICAL TRACTS.

PRAYERS.

A prayer, or psalm, made by the Lord Bacon, chancellor of England..... 405
A prayer made by the Lord Chancellor Bacon..... 405
The student's prayer..... 406
The writer's prayer..... 406
A confession of faith..... 407
The characters of a believing Christian, in paradoxes and seeming contradictions.... 408
An advertisement, touching the controversies of the church of England..... 411
Certain considerations, touching the better pacification and edification of the church of England..... 420
The translation of certain psalms into English verse..... 431
An advertisement touching a holy war..... 435
Questions about the lawfulness of a war for the propagating of religion..... 444

MISCELLANEOUS.

Mr. Bacon's discourse in praise of his sovereign..... 445
A proclamation drawn for his majesty's first coming in..... 451
A draught of a proclamation touching his majesty's style..... 453
Physiological remains..... 455
Medical remains..... 466

JUDICIAL CHARGES AND TRACTS.

SPEECHES.

On taking his place in chancery..... 471
Before the summer circuits..... 475
To Sir W. Jones..... 477
To Sir J. Denham..... 477
To Justice Hutton..... 478
Ordinances for regulating the Court of Chancery..... 479

PAPERS RELATING TO SIR EDWARD COKE.

An expostulation to the Lord Chief Justice Coke..... 485
To the king, about the commendams..... 488
A memorial for his majesty..... 489
To Sir George Villiers..... 491
Tracts relating to commendams..... 491
A remembrance of abuse received from Lord Coke..... 497
Reasons for removing Lord Coke..... 497
To the king..... 498
Lord Viscount Villiers to Sir Francis Bacon 498
To the king..... 499
Remembrances of his majesty's declaration touching Lord Coke..... 500
To the king..... 500
To the king..... 501
Sir Edward Coke to the king..... 502
The king to the lord keeper..... 502
Sir Henry Yelverton to the Lord Keeper Bacon..... 503
To the Marquis of Buckingham..... 504
The Lord Chancellor Ellesmere to the king 505
Lord Coke's answer to the fourth question arising out of Dr. Bonham's case..... 506
Lord Coke's answer to the last question arising upon Bagg's case..... 507
Letter to the judges..... 507
Charge against Whitelocke..... 508

LETTERS RELATING TO LEGAL PROCEEDINGS.

Robert, Earl of Somerset, to Sir Thos. Overbury..... 509
To the king..... 510
To John Murray..... 511
To Mr. Murray..... 511
To Mr. Murray..... 511
To the king..... 511
Supplement of passages omitted in Bacon's speech against Owen..... 512
To the king..... 512
To Sir George Villiers, touching the examination of Sir Robert Cotton..... 515
Sir Francis Bacon to the judges..... 515

Page
Legal questions for the judges 516
Questions of convenience 516
A particular remembrance for his majesty.. 516
Heads of the charge against Robert, Earl of Somerset..... 516
To Sir George Villiers..... 518
To the king 519
Advice to the king, for reviving the commission of suits 520
To the Earl of Buckingham..... 521
To the lord keeper 521
To the lord keeper 521
To the lord chancellor..... 522
To Sir Henry Yelverton 522
To the lord chancellor..... 522
To the lord chancellor..... 522
To the lord chancellor..... 523
To the lord chancellor..... 523
To the lord chancellor..... 523
To the lord chancellor..... 524
To the king 524
To the lord chancellor..... 524
To the Marquis of Buckingham..... 525
To the lord chancellor 525
Notes of a speech of the lord chancellor 525
To the Marquis of Buckingham 526
To the Marquis of Buckingham 526
To the king 526
To the king 527
Notes upon Michael de la Pole's case..... 527
Observations upon Thorpe's case..... 527
Notes upon Sir John Lee's case 527
Notes upon Lord Latimer's case 528
Notes upon John Lord Neville's case..... 528
Questions demanded of the Chief Justice of the King's Bench 528
Lord Coke's answers to the questions upon the case of the Isle of Ely..... 529
Lord Coke's answers to the questions upon D'Arcy's case..... 529
Lord Coke's answer to the question arising upon Godfrey's case..... 530
John Selden, Esq. to the Lord Viscount St. Alban 530

MISCELLANEOUS.

The first copy of my Discourse touching the safety of the Queen's Person 532
The first Fragments of a Discourse touching intelligence and safety of the Queen's Person 532
The Speeches drawn up by Mr. Bacon for the Earl of Essex, in a device exhibited by his lordship before Queen Elizabeth, on the anniversary of her accession to the throne, Nov. 17, 1595..... 533
Remembrances for the King, before his going into Scotland..... 537
Account of Council Business..... 537
An account of Council Business and of other matters committed to me by his Majesty . 538
A Draught of an Act against a usurious shift of gain, in delivering Commodities instead of Money..... 540
A Proposition for the repressing of singular Combats, or Duels..... 540
Advice to the King for reviving the Commission of Suits..... 541
Reasons why the New Company is not to be trusted and continued with the trade of Clothes..... 541

MISCELLANEOUS TRACTS, [*Translated from the Latin.*]

On the Interpretation of Nature..... 543
True Hints on the Interpretation of Nature. 551
The Phenomena of the Universe; or, Natural History for the Basis of Natural Philosophy 558
Description of the Intellectual Globe..... 571

LORD BACON'S WORKS.

SYLVA SYLVARUM;

OR,

A NATURAL HISTORY,

IN TEN CENTURIES.

EDITOR'S PREFACE.

In the spring of 1626, Lord Bacon died. In the same year, Dr. Rawley, "his lordship's first and last chaplain," as he always proudly entitles himself, collected and published the different poems which were written to the memory of his honoured master.[1] In the year 1627, he published the Sylva Sylvarum, with an address to the reader, explaining the intention of Lord Bacon in the compilation of this work, and the probable objections which might be made to the publication; that it was not methodical; and that many of the experiments would be deemed vulgar and trivial.

With respect to the want of method, although, to use the words of Dr. Rawley, "he that looketh attentively into the work, shall find that they have a secret order," yet knowing as he did the charms of symmetry in arrangement and beauty of style, and the necessity of adopting them to insure an immediate and favourable reception of abstruse works, Lord Bacon was never misled by the love of order: he did not worship this idol; but "as Hercules, when he saw the image of Adonis, Venus' minion, in a temple, said in disdain, 'Nil sacri es;' so there are none of Hercules' followers in learning, that is, the more severe and laborious sort of inquirers into truth, but will despise those delicacies and affectations, as indeed capable of no divineness."[2]

"No man was, for his own sake, less attached to system or ornament than Lord Bacon. A plain unadorned style in aphorisms, in which the Novum Organum is written, is, he invariably states, the proper style for philosophy. In the midst of his own arrangement, in the Advancement of Learning, he says: 'The worst and most absurd sort of triflers are those who have pent the whole art into strict methods and narrow systems, which men commonly cry up for the sake of their regularity and style.'"

Again he says: "It is of great consequence to consider whether sciences should be delivered by way of aphorism or of method. Methodical delivery is more fit to win consent or belief; but less fit to point to action; for they carry a show of demonstration in orb or circle, one part illuminating another; and therefore do more satisfy the understanding; but being that actions in common course of life are dispersed, and not orderly digested, they do best agree with dispersed directions. Lastly, aphorisms representing certain portions only, and as it were fragments of sciences, invite others to contribute and add something; whereas methodical delivery carrying show of a total and perfect knowledge, forthwith secureth men as if they were at the furthest."

Again, "Science is much injured by the over early and peremptory reduction of knowledge into

[1] It is a small 8vo, of which there is a copy in the British Museum.

[2] See page 170 of the first volume

arts and method; from which time commonly sciences receive small or no augmentation. But as young men, when they knit and shape perfectly, do seldom grow to a further stature; so knowledge, while it is in aphorisms and observations, it is in growth; but when it once is comprehended in exact methods, it may perchance be further polished and illustrated, and accommodated for use and practice, but it increaseth no more in bulk and substance."[1]

Again: "And as for the overmuch credit that hath been given unto authors in sciences, in making them dictators, that their words should stand, and not consuls, to give advice; the damage is infinite that sciences have received thereby, as the principal cause that hath kept them low, at a stay, without growth or advancement. For hence it hath come, that in arts mechanical the first devisor comes shortest, and time addeth and perfecteth; but in sciences the first author goeth farthest, and time leeseth and corrupteth. So, we see, artillery, sailing, printing, and the like, were grossly managed at the first, and by time accommodated and refined: but contrariwise, the philosophies and sciences of Aristotle, Plato, Democritus, Hippocrates, Euclides, Archimedes, of most vigour at the first, and by time degenerate and embased; whereof the reason is no other, but that in the former many wits and industries have contributed in one; and in the latter many wits and industries have been spent about the wit of some one, whom many times they have rather depraved than illustrated. For as water will not ascend higher than the level of the first spring-head from whence it descendeth, so knowledge derived from Aristotle, and exempted from liberty of examination, will not rise again higher than the knowledge of Aristotle." This was the reason why the Sylva Sylvarum was published in Aphorisms, as "he knew well, that there was no other way open to unloose men's minds, being bound, and, as it were, maleficiate, by the charms of deceiving notions and theories, and thereby made impotent for generation of works."

With respect to some of the experiments being vulgar and trivial, Lord Bacon says in the Novum Organum,[2] "Quod vero ad rerum utilitatem attinet, vel etiam turpitudinem, quibus (ut ait Plinius) honos præfandus est: eæ res, non minus quam lautissimæ et pretiosissimæ, in Historiam Naturalem recipiendæ sunt. Neque propterea polluitur Naturalis Historia: Sol enim æque palatia et cloacas ingreditur, neque tamen polluitur. Nos autem non Capitolium aliquod aut Pyramidem hominum superbiæ dedicamus aut condimus, sed Templum sanctum ad exemplar mundi in intellectu humano fundamus. Itaque exemplar sequimur. Nam quicquid essentia dignum est, id etiam scientia dignum; quæ est essentiæ imago. At vilia æque substitunt ac lauta. Quinetiam, ut e quibusdam putridis materiis, veluti Musco et Zibetho, aliquando optimi odores generantur; ita et ab instantiis vilibus et sordidis, quandoque eximia lux et informatio emanant. Verum de hoc nimis multa; cum hoc genus fastidii sit plane puerile et effœminatum."[3]

And again, "with relation to this contempt of natural history, on account of its containing things that are vulgar, ignoble, subtile, or useless in their origins, we should here consider, as an oracle, the saying of the poor woman to the haughty prince, who rejected her petition as a thing below his dignity to take notice of; then cease to reign; for it is certain, that whoever will not attend to matters of this kind, as if they were too minute or trifling, shall never obtain command or rule over nature."

These two objections stated by Rawley were anticipated by Lord Bacon in the Novum Organum,[4] where he mentions a third objection which is, even at this day, repeatedly urged against the Sylva Sylvarum. "Some," he says, "without doubt, upon reading our history and tables of invention, will meet with experiments not well verified, or even absolutely false; and may thence, perhaps, be apt to suspect, that our inventions are built upon doubtful principles, and erroneous foundations. But this is nothing: for such slips must necessarily happen in the beginning. It is but as if here and there a letter should be misplaced, or mistaken, in a writing, or printed book; which does not, usually, much interrupt the reader: as such errors are easily corrected, from the sense of the place. In the same manner let men observe, that experiments may be falsely believed, and received in natural history; and yet soon after be expunged and rejected, when causes and axioms are discovered. Though, it is true, that if there should be many, and frequent, and continued errors, in a natural and experimental history, they cannot be corrected by any felicity of art or genius: and therefore, if in our Natural History, which is collected, and examined, with so much diligence, so rigorous, and, as it were, with so religious a severity, there should sometimes happen any falsity, or mistake, with re-

[1] Page 173 of the first volume.

[2] Article 120.

[3] "But for unpolite, or even sordid particulars, which as Pliny observes, require an apology for being mentioned; even these ought to be received into a Natural History, no less than the most rich and delicate; for Natural History is not defiled by them, any more than the sun, by shining alike upon the palace and the privy. And we do not endeavour to build a Capitol, or erect a paramid, to the glory of mankind; but to found a temple, in imitation of the world, and consecrate it to the human understanding: so that we must frame our model accordingly. For whatever is worthy of existence, is worthy of our knowledge, which is the image of existence: but ignoble things exist, as well as the noble. Nay, as some excrementitious matters, for example, musk, civet, &c. sometimes produce excellent odours; so sordid instances sometimes afford great light and information. But enough of this; as such a delicacy is perfectly childish and effeminate."

[4] Article 116.

gard to particulars; what must be thought of the common Natural History, which in comparison of ours, is so negligent and remiss; or, what of the philosophy, and the sciences, built upon such quicksands? Let no one, therefore, be concerned, if our history has its errors."

And, in the Advancement of Learning, when treating of credulity, he says, "The matter of manifest truth is not to be mingled or weakened with matter of doubtful credit; and yet again, rarities and reports that seem incredible are not to be suppressed or denied to the memory of men."

From the slightest examination of this work it will appear that, not having such a collection of natural history as he had measured out in his mind, which would have required the purse of a prince, and the assistance of a people, Lord Bacon did the best in his power, trying all things but not believing all things, to make such a collection as might render some assistance to future inquirers, by pointing out the mode in which a natural history ought to be complied, without haste in the admission or rejection of received reports. "The rejection," he says, "which I continally use, of experiments, though it appeareth not, is infinite; but yet if an experiment be probable in the work, and of great use, I receive it, but deliver it as doubtful."

This, perhaps, will be illustrated by some of the articles in the tenth century of this work, in his inquiry touching the "transmission and influx of immateriate virtues and the force of imagination," where he thus begins: "The philosophy of Pythagoras, which afterwards was, by the school of Plato and others, watered and nourished. It was, that the world was one entire perfect living creature; insomuch as Apollonius of Tyana, a Pythagorean prophet, affirmed, that the ebbing and flowing of the sea was the respiration of the world, drawing in water as breath, and putting it forth again. They went on, and inferred, that if the world were a living creature, it had a soul and spirit; which also they held, calling it spiritus mundi, the spirit or soul of the world: by which they did not intend God, for they did admit of a Deity besides, but only the soul or essential form of the universe." . . . With these vast and bottomless follies men have been in part entertained.

"But we, that hold firm to the works of God, and to the sense, which is God's lamp, lucerna Dei spiraculum hominis, will inquire with all sobriety and severity, whether there be to be found in the footsteps of nature, any such transmission and influx of immateriate virtues; and what the force of imagination is; either upon the body imaginant, or upon another body; wherein it will be like that labour of Hercules, in purging the stable of Augeas, to separate from superstitious and magical arts and observations, any thing that is clean and pure natural; and not to be either contemned or condemned."

In this spirit, mistaken for credulity, he says,[1] the sympathy of individuals, that have been entire, or have touched, is of all others the most incredible; yet according unto our faithful manner of examination of nature, we will make some little mention of it. The taking away of warts, by rubbing them with somewhat that afterwards is put to waste and consume, is a common experiment; and I do apprehend it the rather because of my own experience. I had from my childhood a wart upon one of my fingers: afterwards, when I was about sixteen years old, being then at Paris, there grew upon both my hands a number of warts, at the least a hundred, in a month's space. The English ambassador's lady, who was a woman far from superstition, told me one day, she would help me away with my warts: whereupon she got a piece of lard with the skin on and rubbed the warts all over with the fat side; and amongst the rest, that wart which I had had from my childhood: then she nailed the piece of lard, with the fat towards the sun, upon a post of her chamber window, which was to the south. The success was, that within five weeks' space all the warts went quite away: and that wart which I had so long endured for company. But at the rest I did little marvel, because they came in a short time, and might go away in a short time again: but the going away of that which had stayed so long doth yet stick with me."

Again,[2] "The relations touching the force of imagination, and the secret instincts of nature, are so uncertain, as they require a great deal of examination ere we conclude upon them. I would have it first thoroughly inquired, whether there be any secret passages of sympathy between persons of near blood, as parents, children, brothers, sisters, nurse-children, husbands, wives, &c. There be many reports in history, that upon the death of persons of such nearness, men have had an inward feeling of it. I myself remember, that being in Paris, and my father dying in London, two or three days before my father's death, I had a dream, which I told to diverse English gentlemen, that my father's house in the country was plastered all over with black mortar. There is an opinion abroad, whether idle or no I cannot say, that loving and kind husbands have a sense of their wives breeding children, by some accident in their own body."[3]

[1] Article 997. [2] Article 986.

[3] There are in different parts of the Sylva Sylvarum facts evincing Bacon's life of mind, and faculty of generalizing from his earliest infancy. See Art. 946, when his mind is at work upon the nature of imagination, most probably before he was twelve years old, when he quitted his father's house for the university, from whence at sixteen, he went with Sir Amyas Paulet to Paris, and returned after his father's death. See also Art. 151, when in Trinity College meditating upon the nature of sound. See also Art. 140, 148, 248.

Passing from these objections to the uses of natural history, they are explained by Lord Bacon in the treatise De Augmentis[1] and in the Novum Organum.—In the treatise De Augmentis, the subject of Natural History is thus exhibited.

I. *As to the Subject of History.*
1. Of Nature in Course.
   1. Of Celestial Bodies.
   2. Of the Region of the Air.
   3. Of the Earth and Water.
   4. Of the Elements or Genera.
   5. Of the Species.
2. Of Nature wandering or Marvails.
3. Of Arts.

II. *As to its use.*
1. In the Knowledge or *History Narrative.*

2. In being the primitive matter of Philosophy, which he says is defective, and to supply this defect, to discover the properties of creatures and to impose names, the occupation of Adam in Paradise, his tables of invention are constructed in the Novum Organum with the admonition "That all partitions of knowledges be accepted rather for lines and veins, than for sections and separations; and that the continuance and entireness of knowledge be preserved."[2] "The sciences being the pyramids supported by history upon experience as their only and true basis; and so the basis of natural philosophy is natural history; the stage next the basis is physic; the stage next the vertical point is metaphysic: as for the cone and vertical point itself ('opus quod operatur Deus a principio usque ad finem;' the summary law of nature) we do justly doubt, whether man's inquiry can attain unto it. But these three be the true stages of sciences; and are, to men swelled up with their own knowledge, and a daring insolence to invade heaven, like the three hills of the giants

"Ter sunt conati imponere Pelion Ossæ,
Scilicet atque Ossæ frondosum involvere Olympum."

Of this work there have been many editions: and there is an edition in Latin,[3] published in Holland in 1648,[4] and 1661;[5] and at Frankfort in 1665.[6]

There are some observations upon the Sylva Sylvarum in Archbishop Tennison's work,[7] which

[1] There is considerable difference between the arrangement of this part in the Advancement and the De Augmentis.

[2] There is scarcely a page of his works which does not contain an illustration of this union in all the parts of nature, and the injury to the advancement of knowledge from a supposition of their separation. In the Advancement of Learning he says: "We see Cicero the orator complained of Socrates and his school, that he was the first that separated philosophy and rhetoric; whereupon rhetoric became an empty and verbal art. So we may see that the opinion of Copernicus touching the rotation of the earth, which astronomy itself cannot correct, because it is not repugnant to any of the phenomena, yet natural philosophy may correct. So we see also that the science of medicine, if it be destituted and forsaken by natural philosophy, it is not much better than an empirical practice."

In the treatise De Augmentis, speaking of the mode in which the laws of the heavenly bodies would be discovered, and (if the anecdote respecting Newton and the falling apple is true) were discovered, he thus predicts, "Whoever shall reject the feigned divorces of superlunary and sublunary bodies; and shall intentively observe the appetencies of matter, and the most universal passions, (which in either globe are exceeding potent, and transverberate the universal nature of things,) he shall receive clear information concerning celestial matters from the things seen here with us: and contrariwise from those motions which are practised in heaven; he shall learn many observations which now are latent, touching the motions of bodies here below; not only so far as these inferior motions are moderated by superior, but in regard they have a mutual intercourse by passions common to them both."

And to the same effect, he says in another place: "We must openly profess that our hope of discovering the truth with regard to the celestial bodies, depends upon the observation of the common properties, or the passions and appetites of the matter of both states; for, as to the separation that is supposed betwixt the ethereal and sublunary bodies, it seems to me no more than a fiction, and a degree of superstition mixed with rashness, &c.—Our chiefest hope, and dependence in the consideration of the celestial bodies, is, therefore, placed in physical reason, though not such as are commonly so called; but those laws, which no diversity of place or region can abolish, break through, disturb, or alter."

And in the Novum Organum, "Suppose, for example, the inquiry about the nature of spontaneous rotation, attraction, and many other natures, which are more common and familiar to us than the celestial bodies themselves. And let no one expect to determine the question, whether the diurnal motion belongs to the heavens or the earth, unless he first understand the nature of spontaneous rotation."

As an instance of this union of nature, and of Bacon's tendency to generalize, see Articles 91, 92, 93, and above all, see his suggestions in the Novum Organum, respecting Magical Instances, or great effects produced from apparently small causes. See page 316 of the first volume. The correctness of the reasoning I am not now investigating; I am merely stating the fact as an illustration of the union between all nature, and of Bacon's facility in discovering this union.

[3] I do not find this in any of the editions of Bacon's Works published in England.

[4] (12mo.) I have a copy, which is not scarce.

[5] (12mo.) There is a copy in the British Museum.

[6] Opera omnia, &c., Folio. Fran. 1665.

[7] "The seventh and greatest branch of the Third Part of the Instauration, is his Sylva Sylvarum, or Natural History; which containeth many materials for the building of philosophy, as the Organum doth directions for the work. It is a history not only of nature freely moving in her course, (as in the production of meteors, plants, minerals;) but also of nature in constraint, and vexed and tortured by human art and experiment. And it is not a history of such things orderly

thus conclude, "Whilst I am speaking of this work of his lordship of Natural History, there comes to my mind a very memorable relation, reported by him who bare a part in it, the Rev. Dr. Rawley. One day, his lordship was dictating to that doctor some of the experiments in his Sylva. The same day, he had sent a friend to court, to receive for him a final answer, touching the effect of a grant which had been made him by King James. He had hitherto, only hope of it, and hope deferred; and he was desirous to know the event of the matter, and to be freed, one way or other, from the suspense of his thoughts. His friend returning, told him plainly, that he must thenceforth despair of that grant, how much soever his fortunes needed it. Be it so, said his lordship; and then he dismissed his friend very cheerfully, with thankful acknowledgments of his service. His friend being gone, he came straightway to Dr. Rawley, and said thus to him. Well sir! yon business wont go on; let us go on with this, for this is in our power. And then he dictated to him afresh, for some hours, without the least hesitancy of speech, or discernible interruption of thought."

ranged; but thrown into a heap. For his lordship, that he might not discourage other collectors, did not cast this book into exact method; for which reason it hath the less ornament, but not much the less use.

"In this book are contained experiments of light, and experiments of use, (as his lordship was wont to distinguish:) and amongst them some extraordinary, and others common. He understood that what was common in one country, might be a rarity in another: for which reason, Dr. Caius, when in Italy, thought it worth his pains to make a large and elegant description of our way of brewing. His lordship also knew well, that an experiment manifest to the vulgar, was a good ground for the wise to build further upon. And himself rendered common ones extraordinary, by admonitions for further trials and improvements. Hence his lordship took occasion to say, that his writing of Sylva Sylvarum, was (to speak properly) not a Natural History, but a high kind of natural magic: because it was not only a description of nature, but a breaking of nature into great and strange works.

"This book was written by his lordship in the English tongue, and translated by an obscure interpreter, into French, and out of that translation into Latin, by James Gruter, in such ill manner, that they darkened his lordship's sense, and debased his expression. James Gruter was sensible of his miscarriage, being kindly advertised of it by Dr. Rawley: and he left behind him divers amendments, published by his brother, Isaac Gruter, in a second edition. Yet still so many errors have escaped, that that work requireth a third hand.

"Monsieur Ælius Deodatus had once engaged an able person in the translation of this book; one who could have done his lordship right, and obliged such readers as understood not the English original. He began, and went through the three first centuries, and then desisted; being desired by him who set him on work, to take his hand quite off from that pen, with which he moved so slowly. His translation of the third century is now in my hands; but that of the two first I believe is lost." Archbishop Tennison then annexes some specimens of the translation.

SYLVA SYLVARUM.

TO THE READER.

Having had the honour to be continually with my lord in compiling of this work, and to be employed therein, I have thought it not amiss, with his lordship's good leave and liking, for the better satisfaction of those that shall read it, to make known somewhat of his lordship's intentions touching the ordering and publishing of the same. I have heard his lordship often say, that if he should have served the glory of his own name, he had been better not to have published this Natural History: for it may seem an indigested heap of particulars, and cannot have that lustre, which books cast into methods have; but that he resolved to prefer the good of men, and that which might best secure it, before any thing that might have relation to himself. And he knew well, that there was no other way open to unloose men's minds, being bound, and, as it were, maleficiate, by the charms of deceiving notions and theories, and thereby made impotent for generation of works, but only no where to depart from the sense, and clear experience, but to keep close to it, especially in the beginning: besides, this Natural History was a debt of his, being designed and set down for a third part of the Instauration. I have also heard his lordship discourse that men, no doubt, will think many of the experiments contained in this collection, to be vulgar and trivial, mean and sordid, curious and fruitless: and therefore, he wisheth that they would have perpetually before their eyes what is now in doing, and the difference between this Natural History and others. For those Natural Histories which are extant, being gathered for delight and use, are full of pleasant descriptions and pictures, and affect and seek after admiration, rarities, and secrets. But, contrariwise, the scope which his lordship intendeth is, to write such a Natural History as may be fundamental to the erecting and building of a true philosophy, for the illumination of the understanding, the extracting of axioms, and the producing of many noble works and effects. For he hopeth by this means to acquit himself of that for which he taketh himself in a sort bound, and that is, the advancement of all learning and sciences. For, having in this present work collected the materials for the building, and in his Novum Organum, of which his lordship is yet to publish a second part, set down the instruments and directions for the work; men shall now be wanting to themselves, if they raise not knowledge to that perfection whereof the nature of mortal men is capable. And in this behalf, I have heard his lordship speak complainingly, that his lordship, who thinketh he deserveth to be an architect in this building, should be forced to be a workman, and a labourer, and to dig the clay, and burn the brick; and, more than that, according to the hard condition of the Israelites at the latter end, to gather the straw and stubble, over all the fields, to burn the bricks withal. For he knoweth, that except he do it, nothing will be done: men are so set to despise the means of their own good. And as for the baseness of many of the experiments; as long as they be God's works, they are honourable enough. And for the vulgarness of them, true axioms must be drawn from plain experience, and not from doubtful; and his lordship's course is to make wonders plain, and not plain things wonders; and that experience likewise must be broken and grinded, and not whole, or as it groweth. And for use; his lordship hath often in his mouth the two kinds of experiments; "experimenta fructifera," and "experimenta lucifera:" experiments of use, and experiments of light: and he reporteth himself, whether he were not a strange man, that should think that light hath no use, because it hath no matter. Further, his lordship thought good also to add unto many of the experiments themselves some gloss of the causes: that in the succeeding work of interpreting nature, and framing axioms, all things may be in more readiness. And for the causes herein by him assigned; his lordship persuadeth himself, they are far more certain than those that are rendered by others; not for any excellency of his own wit, as his lordship is wont to say, but in respect of his continual conversation with nature and experience. He did consider likewise, that by this addition of causes, men's minds, which make so much haste to find out the causes of things, would not think themselves utterly lost in a vast wood of experience, but stay upon these causes, such as they are, a little, till true axioms may be more fully discovered. I have heard his lordship say also, that one great reason, why he would not put these particulars into any exact method, though he that looketh attentively into them shall find that they have a secret order, was, because he conceived that

other men would now think that they could do the like; and so go on with a further collection: which, if the method had been exact, many would have despaired to attain by imitation. As for his lordship's love of order, I can refer any man to his lordship's Latin book, De Augmentis Scientiarum; which, if my judgment be any thing, is written in the exactest order that I know any writing to be. I will conclude with a usual speech of his lordship's; That this work of his Natural History is the world as God made it, and not as men have made it; for that it hath nothing of imagination.

W. RAWLEY.

This epistle is the same that should have been prefixed to this book, if his lordship had lived.

CENTURY I.

Experiments in consort, touching the straining and passing of bodies one through another; which they call Percolation.

DIG a pit upon the sea-shore, somewhat above the high-water mark, and sink it as deep as the low-water mark; and as the tide cometh in, it will fill with water, fresh and potable. This is commonly practised upon the coast of Barbary, where other fresh water is wanting. And Cæsar knew this well when he was besieged in Alexandria; for by digging of pits in the sea-shore, he did frustrate the laborious works of the enemies, which had turned the seawater upon the wells of Alexandria; and so saved his army, being then in desperation. But Cæsar mistook the cause, for he thought that all sea-sands had natural springs of fresh water: but it is plain, that it is the sea-water; becaus the pit filleth according to the measure of the tide; and seawater passing or straining through the sands, leaveth the saltness.

2. I remember to have read, that trial hath been made of salt-water passed through earth, through ten vessels, one within another; and yet it hath not lost its saltness, as to become potable: but the same man saith, that, by relation of another, salt-water drained through twenty vessels hath become fresh. This experiment seemeth to cross that other of pits made by the sea-side; and yet but in part, if it be true that twenty repetitions do the effect. But it is worth the note, how poor the imitations of nature are in common courses of experiments, except they be led by great judgment, and some good light of axioms. For first, there is no small difference between a passage of water through twenty small vessels, and through such a distance, as between the low-water and high-water mark. Secondly, there is a great difference between earth and sand; for all earth hath in it a kind of nitrous salt, from which sand is more free; and besides, earth doth not strain the water so finely as sand doth. But there is a third point, that I suspect as much or more than the other; and that is, that in the experiment of transmission of the sea-water into the pits, the water riseth: but in the experiment of transmission of the water through the vessels, it falleth. Now certain it is that this salter part of water, once salted throughout, goeth to the bottom. And therefore no marvel, if the draining of water by descent doth not make it fresh: besides, I do somewhat doubt, that the very dashing of the water, that cometh from the sea, is more proper to strike off the salt part, than where the water slideth of her own motion.

3. It seemeth percolation, or transmission, which is commonly called straining, is a good kind of separation, not only of thick from thin, and gross from fine, but of more subtile natures; and varieth according to the body through which the transmission is made: as if through a woollen bag, the liquor leaveth the fatness; if through sand, the saltness, &c. They speak of severing wine from water, passing it through ivy wood, or through other the like porous body; but "non constat."

4. The gum of trees, which we see to be commonly shining and clear, is but a fine passage or straining of the juice of the tree through the wood and bark. And in like manner, Cornish diamonds, and rock rubies, which are yet more resplendent than gums, are the fine exudations of stone.

5. Aristotle giveth the cause, vainly, why the feathers of birds are more lively colours than the hairs of beasts; for no beast hath any fine azure, or carnation, or green hair. He saith, it is because birds are more in the beams of the sun than beasts; but that is manifestly untrue; for cattle are more in the sun than birds, that live commonly in the woods, or in some covert. The true cause is, that the excrementitious moisture of living creatures, which maketh as well the feathers in birds, as the hair in beasts, passeth in birds through a finer and more delicate strainer than it doth in beasts: for feathers pass through quills; and hair through skin.

6. The clarifying of liquors by adhesion, is an inward percolation; and is effected, when some cleaving body is mixed and agitated with the liquors; whereby the grosser part of the liquor sticks to that cleaving body; and so the finer parts

are freed from the grosser. So the apothecaries clarify their syrups by whites of eggs, beaten with the juices which they would clarify; which whites of eggs gather all the dregs and grosser parts of the juice to them; and after the syrup being set on the fire, the whites of eggs themselves harden, and are taken forth. So hippocras is clarified by mixing with milk, and stirring it about, and then passing it through a woollen bag, which they call Hippocrates's Sleeve, and the cleaving nature of the milk draweth the powder of the spices, and grosser parts of the liquor to it; and in the passage they stick upon the woollen bag.

7. The clarifying of water is an experiment tending to health; besides the pleasure of the eye, when water is crystalline. It is effected by casting in and placing pebbles at the head of a current, that the water may strain through them.

8. It may be, percolation doth not only cause clearness and splendour, but sweetness of savour; for that also followeth as well as clearness, when the finer parts are severed from the grosser. So it is found, that the sweats of men, that have much heat, and exercise much, and have clean bodies, and fine skins, do smell sweet; as was said of Alexander; and we see commonly that gums have sweet odours.

Experiments in consort, touching motion of bodies upon their pressure.

9. Take a glass, and put water into it, and wet your finger, and draw it round about the lip of the glass, pressing it somewhat hard; and after you have drawn it some few times about, it will make the water frisk and sprinkle up in fine dew. This instance doth excellently demonstrate the force of compression in a solid body: for whensoever a solid body, as wood, stone, metal, &c. is pressed, there is an inward tumult in the parts thereof seeking to deliver themselves from the compression: and this is the cause of all violent motion. Wherein it is strange in the highest degree, that this motion hath never been observed, nor inquired; it being of all motions the most common, and the chief root of all mechanical operations. This motion worketh in round at first, by way of proof and search which way to deliver itself: and then worketh in progress where it findeth the deliverance easiest In liquors this motion is visible; for all liquors strucken make round circles, and withal dash; but in solids, which break not, it is so subtile as it is invisible; but nevertheless bewrayeth itself by many effects; as in this instance whereof we speak. For the pressure of the finger, furthered by the wetting, because it sticketh so much the better unto the lip of the glass, after some continuance, putteth all the small parts of the glass into work, that they strike the water sharply; from which percussion that sprinkling cometh.

10. If you strike or pierce a solid body that is brittle, as glass, or sugar, it breaketh not only where the immediate force is; but breaketh all about into shivers and fitters; the motion, upon the pressure, searching all ways, and breaking where it findeth the body weakest.

11. The powder in shot, being dilated into such a flame as endureth not compression, moveth likewise in round, the flame being, in the nature of a liquid body, sometimes recoiling, sometimes breaking the piece, but generally discharging the bullet, because there it findeth easiest deliverance.

12. This motion upon pressure, and the reciprocal thereof, which is motion upon tensure, we use to call, by one common name, motion of liberty; which is, when any body, being forced to a preternatural extent or dimension, delivereth and restoreth itself to the natural: as when a blown bladder pressed, riseth again; or when leather or cloth tentured, spring back. These two motions, of which there be infinite instances, we shall handle in due place.

13. This motion upon pressure is excellently also demonstrated in sounds; as when one chimeth upon a bell, it soundeth; but as soon as he layeth his hand upon it, the sound ceaseth: and so the sound of a virginal string, as soon as the quill of the jack falleth from it, stoppeth. For these sounds are produced by the subtile percussion of the minute parts of the bell, or string, upon the air; all one, as the water is caused to leap by the subtile percussion of the minute parts of the glass, upon the water, whereof we spake a little before in the ninth experiment. For you must not take it to be the local shaking of the bell, or string, that doth it: as we shall fully declare, when we come hereafter to handle sounds.

Experiments in consort, touching separations of bodies by weight.

14. Take a glass with a belly and a long neb; fill the belly, in part, with water: take also another glass, whereinto put claret wine and water mingled; reverse the first glass, with the belly upwards, stopping the neb with your finger; then dip the mouth of it within the second glass, and remove your finger: continue it in that posture for a time; and it will unmingle the wine from the water: the wine ascending and settling in the top of the upper glass; and the water descending and settling in the bottom of the lower glass. The passage is apparent to the eye; for you shall see the wine, as it were, in a small vein, rising through the water. For handsomeness' sake, because the working requireth some small time, it were good you hang the upper glass upon a nail. But as soon as there is gathered so much pure and unmixed water in the bottom of the lower glass, as that the mouth of the upper glass dippeth into it, the motion ceaseth.

15. Let the upper glass be wine, and the lower water; there followeth no motion at all. Let the upper glass be water pure, the lower water coloured, or contrariwise, there followeth no motion at all. But it hath been tried, that though the mixture of wine and water, in the lower glass, be three parts water and but one wine, yet it doth not dead the motion. This separation of water and wine appeareth to be made by weight; for it must be of bodies of unequal weight, or else it worketh not; and the heavier body must ever be in the upper glass. But then note withal, that the water being made pensile, and there being a great weight of water in the belly of the glass, sustained by a small pillar of water in the neck of the glass, it is that which setteth the motion on work: for water and wine in one glass, with long standing, will hardly sever.

16. This experiment would be extended from mixtures of several liquors, to simple bodies which consist of several similar parts: try it therefore with brine or salt-water, and fresh water: placing the salt-water, which is the heavier, in the upper glass; and see whether the fresh will come above. Try it also with water thick sugared, and pure water; and see whether the water, which cometh above, will lose its sweetness: for which purpose it were good there were a little cock made in the belly of the upper glass.

Experiments in consort, touching judicious and accurate infusions, both in liquors and air.

17. In bodies containing fine spirits, which do easily dissipate, when you make infusions, the rule is, a short stay of the body in the liquor receiveth the spirit; and a longer stay confoundeth it; because it draweth forth the earthy part withal, which embaseth the finer. And therefore it is an error in physicians, to rest simply upon the length of stay for increasing the virtue. But if you will have the infusion strong, in those kinds of bodies which have fine spirits, your way is not to give longer time, but to repeat the infusion of the body oftener. Take violets, and infuse a good pugil of them in a quart of vinegar; let them stay three quarters of an hour, and take them forth, and refresh the infusion with like quantity of new violets seven times; and it will make a vinegar so fresh of the flower, as if, a twelvemonth after, it be brought you in a saucer, you shall smell it before it come at you. Note, that it smelleth more perfectly of the flower a good while after than at first.

18. This rule, which we have given, is of singular use for the preparations of medicines, and other infusions. As for example: the leaf of burrage hath an excellent spirit to repress the fuliginous vapour of dusky melancholy, and so to cure madness: but nevertheless if the leaf be infused long it yieldeth forth but a raw substance, of no virtue: therefore I suppose, that if in the must of wine, or wort of beer, while it worketh, before it be tunned, the burrage stay a small time, and be often changed with fresh; it will make a sovereign drink for melancholy passions. And the like I conceive of orange flowers.

19. Rhubarb hath manifestly in it parts of contrary operations: parts that purge; and parts that bind the body; and the first lie looser, and the latter lie deeper: so that if you infuse rhubarb for an hour, and crush it well, it will purge better, and bind the body less after the purging than if it had stood twenty-four hours; this is tried; but I conceive likewise, that by repeating the infusion of rhubarb several times, as was said of violets, letting each stay in but a small time, you may make it as strong a purging medicine as scammony. And it is not a small thing won in physic, if you can make rhubarb, and other medicines that are benedict, as strong purgers as those that are not without some malignity.

20. Purging medicines, for the most part, have their purgative virtue in a fine spirit; as appeareth by that they endure not boiling without much loss of virtue. And therefore it is of good use in physic, if you can retain the purging virtue, and take away the unpleasant taste of the purger; which it is like you may do, by this course of infusing oft, with little stay, for it is probable that the horrible and odious taste is in the grosser part.

21. Generally, the working by infusions is gross and blind, except you first try the issuing of the several parts of the body, which of them issue more speedily, and which more slowly; and so by apportioning the time, can take and leave that quality which you desire. This to know there be two ways; the one to try what long stay, and what short stay worketh as hath been said; the other to try in order the succeeding infusions of one and the same body, successively, in several liquors. As, for example; take orange pills, or rosemary, or cinnamon, or what you will; and let them infuse half an hour in water; then take them out, and infuse them again in other water; and so the third time: and then taste and consider the first water, the second, and the third; and you will find them differing, not only in strength and weakness, but otherwise in taste or odour; for it may be the first water will have more of the scent, as more fragrant; and the second more of the taste, as more bitter or biting, &c.

22. Infusions in air, for so we may well call odours, have the same diversities with infusions in water; in that the several odours, which are in one flower, or other body, issue at several times; some earlier, some later: so we find that violets, woodbines, strawberries, yield a pleasing scent, that cometh forth first; but soon after an ill scent quite differing from the former. Which is caused, not so much by mellowing, as by the late issuing of the grosser spirit.

23. As we may desire to extract the finest spirits in some cases; so we may desire also to discharge them, as hurtful, in some other. So wine burnt, by reason of the evaporating of the finer spirit, inflameth less, and is best in agues: opium loseth some of its poisonous quality, if it be vapoured out, mingled with spirits of wine, or the like: sena loseth somewhat of its windiness by decocting; and generally, subtile or windy spirits are taken off by incension, or evaporation. And even in infusions in things that are of too high a spirit, you were better pour off the first infusion, after a small time, and use the latter.

Experiment solitary touching the appetite of continuation in liquids.

24. Bubbles are in the form of a hemisphere; air within, and a little skin of water without: and it seemeth somewhat strange, that the air should rise so swiftly while it is in the water; and when it cometh to the top, should be stayed by so weak a cover as that of the bubble is. But as for the swift ascent of the air, while it is under the water, that is a motion of percussion from the water; which itself descending driveth up the air; and no motion of levity in the air. And this Democritus called "motus plagæ." In this common experiment, the cause of the inclosure of the bubble is, for that the appetite to resist separation, or discontinuance, which in solid bodies is strong, is also in liquors, though fainter and weaker; as we see in this of the bubble: we see it also in little glasses of spittle that children make of rushes; and in castles of bubbles, which they make by blowing into water, having obtained a little degree of tenacity by mixture of soap: we see it also in the stillicides of water, which if there be water enough to follow, will draw themselves into a small thread, because they will not discontinue; but if there be no remedy, then they cast themselves into round drops; which is the figure that saveth the body most from discontinuance: the same reason is of the roundness of the bubble, as well for the skin of water, as for the air within: for the air likewise avoideth discontinuance; and therefore casteth itself into a rough figure. And for the stop and arrest of the air a little while, it showeth that the air of itself hath little or no appetite of ascending.

Experiment solitary touching the making of artificial springs.

25. The rejection, which I continually use, of experiments, though it appeareth not, is infinite: but yet if an experiment be probable in the work, and of great use, I receive it, but deliver it as doubtful. It was reported by a sober man, that an artificial spring may be made thus: Find out a hanging ground, where there is a good quick fall of rain-water Lay a half trough of stone, of a good length, three or four foot deep within the same ground; with one end upon the high ground, the other upon the low. Cover the trough with brakes a good thickness, and cast sand upon the top of the brakes: you shall see, saith he, that after some showers are past, the lower end of the trough will run like a spring of water: which is no marvel, if it hold while the rain-water lasteth; but he said it would continue long time after the rain is past: as if the water did multiply itself upon the air, by the help of the coldness and condensation of the earth, and the consort of the first water.

Experiment solitary touching the venomous quality of man's flesh.

26. The French, which put off the name of the French disease unto the name of the disease of Naples, do report, that at the siege of Naples, there were certain wicked merchants that barrelled up man's flesh, of some that had been lately slain in Barbary, and sold it for tunney; and that upon that foul and high nourishment was the original of that disease. Which may well be, for that it is certain that the cannibals in the West Indies eat man's flesh: and the West Indies were full of the pox when they were first discovered: and at this day the mortalest poisons, practised by the West Indians, have some mixture of the blood, or fat, or flesh of man: and divers witches and sorceresses, as well amongst the heathen, as amongst the Christians, have fed upon man's flesh, to aid, as it seemeth, their imagination, with high and foul vapours.

Experiment solitary touching the version and transmutation of air into water.

27. It seemeth that there be these ways, in likelihood, of version of vapours of air into water and moisture. The first is cold; which doth manifestly condense; as we see in the contracting of the air in the weather-glass; whereby it is a degree nearer to water. We see it also in the generation of springs, which the ancients thought, very probably, to be made by the version of air into water, holpen by the rest, which the air hath in those parts; whereby it cannot dissipate. And by the coldness of rocks; for there springs are chiefly generated. We see it also in the effects of the cold of the middle region, as they call it, of the air; which produceth dews and rains. And the experiment of turning water into ice, by snow, nitre, and salt, whereof we shall speak hereafter, would be transferred to the turning of air into water. The second way is by compression; as in stillatories, where the vapour is turned back upon itself, by the encounter of the sides of the stillatory; and in the dew upon the covers of boiling pots; and in the dew towards rain, upon marble and wainscot. But this is like to do no great effect; except it be

upon vapours, and gross air, that are already very near in degree to water. The third is that, which may be searched into, but doth not yet appear; which is, by mingling of moist vapours with air; and trying if they will not bring a return of more water than the water was at first: for if so, that increase is a version of the air: therefore put water in the bottom of a stillatory, with the neb stopped; weigh the water first; hang in the middle of the stillatory a large spunge; and see what quantity of water you can crush out of it; and what it is more or less compared with the water spent; for you must understand, that if any version can be wrought, it will be easiliest done in small pores: and that is the reason why we prescribe a spunge. The fourth way is probable also, though not appearing; which is, by receiving the air into the small pores of bodies: for, as hath been said, every thing in small quantity is more easy for version; and tangible bodies have no pleasure in the consort of air, but endeavour to subact it into a more dense body; but in entire bodies it is checked; because if the air should condense, there is nothing to succeed: therefore it must be in loose bodies, as sand, and powder; which we see, if they lie close, of themselves gather moisture.

Experiment solitary touching helps towards the beauty and good features of persons.

28. It is reported by some of the ancients; that whelps, or other creatures, if they be put young into such a cage or box, as they cannot rise to their stature, but may increase in breadth or length, will grow accordingly as they can get room; which if it be true and feasible, and that the young creature so pressed and straitened, doth not thereupon die, it is a means to produce dwarf creatures, and in a very strange figure. This is certain, and noted long since, that the pressure or forming of parts of creatures, when they are very young, doth alter the shape not a little: as the stroking of the heads of infants, between the hands, was noted of old, to make "Macrocephali;" which shape of the head, at that time, was esteemed. And the raising gently of the bridge of the nose, doth prevent the deformity of a saddle nose. Which observation well weighed, may teach a means to make the persons of men and women, in many kinds, more comely and better featured than otherwise they would be; by the forming and shaping of them in their infancy: as by stroking up the calves of the legs, to keep them from falling down too low; and by stroking up the forehead, to keep them from being low-foreheaded. And it is a common practice to swathe infants, that they may grow more straight, and better shaped: and we see young women, by wearing strait bodice, keep themselves from being gross and corpulent.

Experiment solitary touching the condensing of air in such sort as it may put on weight, and yield nourishment.

29. Onions, as they hang, will many of them shoot forth; and so will penny-royal; and so will an herb called orpin; with which they use in the country to trim their houses, binding it to a lath or stick, and setting it against a wall. We see it likewise more especially in the greater semper-vive, which will put out branches, two or three years: but it is true, that commonly they wrap the root in a cloth besmeared with oil, and renew it once in half a year. The like is reported, by some of the ancients, of the stalks of lilies. The cause is; for that these plants have a strong, dense, and succulent moisture, which is not apt to exhale; and so is able, from the old store, without drawing help from the earth, to suffice the sprouting of the plant: and this sprouting is chiefly in the late spring or early summer; which are the times of putting forth. We see also, that stumps of trees lying out of the ground, will put forth sprouts for a time. But it is a noble trial, and of very great consequence, to try whether these things, in the sprouting, do increase weight; which must be tried, by weighing them before they be hanged up; and afterwards again, when they are sprouted. For if they increase not in weight, then it is no more but this; that what they send forth in the sprout, they lose in some other part: for if they gather weight, then it is "magnale naturæ;" for it it showeth that air may be made so to be condensed as to be converted into a dense body; whereas the race and period of all things, here above the earth, is to extenuate and turn things to be more pneumatical and rare; and not to be retrograde, from pneumatical to that which is dense. It showeth also, that air can nourish; which is another great matter of consequence. Note, that to try this, the experiment of the semper-vive must be made without oiling the cloth; for else, it may be, the plant receiveth nourishment from the oil.

Experiment solitary touching the commixture of flame and air, and the great force thereof.

30. Flame and air do not mingle, except it be in an instant; or in the vital spirits of vegetables and living creatures. In gunpowder, the force of it hath been ascribed to rarefaction of the earthy substance into flame; and thus far it is true: and then, forsooth, it is become another element; the form whereof occupieth more place; and so of necessity, followeth a dilatation; and therefore, lest two bodies should be in one place, there must needs also follow an expulsion of the pellet; or blowing up of the mine. But these are crude and ignorant speculations. For flame, if there were nothing else, except it were in very great quantity, will be suffocate with any hard body, such as a pellet is; or the barrel of a gun,

so as the flame would not expel the hard body; but the hard body would kill the flame, and not suffer it to kindle or spread. But the cause of this so potent a motion, is the nitre, which we call otherwise saltpetre, which having in it a notable crude and windy spirit, first by the heat of the fire suddenly dilateth itself; and we know that simple air, being preternaturally attenuated by heat, will make itself room, and break and blow up that which resisteth it; and secondly, when the nitre hath dilated itself, it bloweth abroad the flame, as an inward bellows. And therefore we see that brimstone, pitch, camphire, wild-fire, and divers other inflammable matters, though they burn cruelly, and are hard to quench, yet they make no such fiery wind as gunpowder doth; and on the other side, we see that quicksilver, which is a most crude and watery body, heated, and pent in, hath the like force with gunpowder. As for living creatures, it is certain, their vital spirits are a substance compounded of an airy and flamy matter; and though air and flame being free, will not well mingle; yet bound in by a body that hath some fixing, they will. For that you may best see in those two bodies, which are their aliments, water and oil; for they likewise will not well mingle of themselves; but in the bodies of plants, and living creatures, they will. It is no marvel therefore, that a small quantity of spirits, in the cells of the brain, and canals of the sinews, are able to move the whole body, which is of so great mass, both with so great force, as in wrestling, leaping; and with so great swiftness, as in playing division upon the lute. Such is the force of these two natures, air and flame, when they incorporate.

Experiment solitary touching the secret nature of flame.

31. Take a small wax candle, and put it in a socket of brass or iron; then set it upright in a porringer full of spirit of wine heated: then set both the candle and spirit of wine on fire, and you shall see the flame of the candle open itself, and become four or five times bigger than otherwise it would have been; and appear in figure globular, and not in pyramis. You shall see also, that the inward flame of the candle keepeth colour, and doth not wax any whit blue towards the colour of the outward flame of the spirit of wine. This is a noble instance; wherein two things are most remarkable: the one, that one flame within another quencheth not; but is a fixed body, and continueth as air or water do. And therefore flame would still ascend upwards in one greatness, if it were not quenched on the sides: and the greater the flame is at the bottom, the higher is the rise. The other, that flame doth not mingle with flame, as air doth with air, or water with water, but only remaineth contiguous; as it cometh to pass betwixt consisting bodies. It appeareth also, that the form of a pyramis in flame, which we usually see, is merely by accident, and that the air about, by quenching the sides of the flame, crusheth it, and extenuateth it into that form; for of itself it would be round; and therefore smoke is in the figure of a pyramis reversed; for the air quencheth the flame, and receiveth the smoke. Note also, that the flame of the candle, within the flame of the spirit of wine, is troubled; and doth not only open and move upwards, but moveth waving, and to and fro; as if flame of its own nature, if it were not quenched, would roll and turn, as well as move upwards. By all which it should seem, that the celestial bodies, most of them, are true fires or flames, as the Stoics held; more fine, perhaps, and rarified than our flame is. For they are all globular and determinate; they have rotation; and they have the colour and splendour of flame: so that flame above is durable, and consistent, and in its natural place; but with us it is a stranger, and momentary, and impure: like Vulcan that halted with his fall.

Experiment solitary touching the different force of flame in the midst and on the sides.

32. Take an arrow, and hold it in flame for the space of ten pulses, and when it cometh forth, you shall find those parts of the arrow which were on the outsides of the flame more burned, blacked, and turned almost into a coal, whereas that in the midst of the flame will be as if the fire had scarce touched it. This is an instance of great consequence for the discovery of the nature of flame; and showeth manifestly, that flame burneth more violently towards the sides than in the midst: and which is more, that heat or fire is not violent or furious, but where it is checked and pent. And therefore the Peripatetics, howsoever their opinion of an element of fire above the air is justly exploded, in that point they acquit themselves well: for being opposed, that if there were a sphere of fire, that encompassed the earth so near hand, it were impossible but all things should be burnt up; they answer, that the pure elemental fire, in its own place, and not irritated, is but of a moderate heat.

Experiment solitary touching the decrease of the natural motion of gravity, in great distance from the earth; or within some depth of the earth.

33. It is affirmed constantly by many, as a usual experiment, that a lump of ore in the bottom of a mine will be tumbled and stirred by two men's strength, which, if you bring it to the top of the earth, will ask six men's strength at the least to stir it. It is a noble instance, and is fit to be tried to the full; for it is very probable, that the motion of gravity worketh weakly, both far from the earth, and also within the earth: the former, because the appetite of union of dense

bodies with the earth, in respect of the distance, is more dull: the latter, because the body hath in part attained its nature when it is in some depth in the earth. For as for the moving to a point or place, which was the opinion of the ancients, it is a mere vanity.

Experiment solitary touching the contraction of bodies in bulk, by the mixture of the more liquid body with the more solid.

34. It is strange how the ancients took up experiments upon credit, and yet did build great matters upon them. The observation of some of the best of them, delivered confidently, is, that a vessel filled with ashes will receive the like quantity of water that it would have done if it had been empty. But this is utterly untrue, for the water will not go in by a fifth part. And I suppose, that that fifth part is the difference of the lying close, or open, of the ashes; as we see that ashes alone, if they be hard pressed, will lie in less room: and so the ashes with air between, lie looser; and with water closer. For I have not yet found certainly, that the water itself, by mixture of ashes or dust, will shrink or draw into less room.

Experiment solitary touching the making vines more fruitful.

35. It is reported of credit, that if you lay good store of kernels of grapes about the root of a vine, it will make the vine come earlier and prosper better. It may be tried with other kernels laid about the root of a plant of the same kind; as figs, kernels of apples, &c. The cause may be, for that the kernels draw out of the earth juice fit to nourish the tree, as those that would be trees of themselves, though there were no root; but the root being of greater strength robbeth and devoureth the nourishment, when they have drawn it: as great fishes devour little.

Experiments in consort touching purging medicines.

36. The operation of purging medicines and the causes thereof, have been thought to be a great secret; and so according to the slothful manner of men, it is referred to a hidden propriety, a specifical virtue, and a fourth quality, and the like shifts of ignorance. The causes of purging are divers: all plain and perspicuous, and thoroughly maintained by experience. The first is, that whatsoever cannot be overcome and digested by the stomach, is by the stomach either put up by vomit, or put down to the guts; and by that motion of expulsion in the stomach and guts, other parts of the body, as the orifices of the veins, and the like, are moved to expel by consent. For nothing is more frequent than motion of consent in the body of man. This surcharge of the stomach is caused either by the quality of the medicine, or by the quantity. The qualities are three; extreme bitter, as in aloes, coloquintida, &c. loathsome and of horrible taste, as in agaric, black hellebore, &c. and of secret malignity, and disagreement towards man's body, many times not appearing much in the taste, as in scammony, mechoachan, antimony, &c. And note well, that if there be any medicine that purgeth, and hath neither of the first two manifest qualities, it is to be held suspected as a kind of poison; for that it worketh either by corrosion, or by a secret malignity, and enmity to nature; and therefore such medicines are warily to be prepared and used. The quantity of that which is taken doth also cause purging; as we see in a great quantity of new milk from the cow; yea and a great quantity of meat; for surfeits many times turn to purges, both upwards and downwards. Therefore we see generally, that the working of purging medicines cometh two or three hours after the medicines taken: for that the stomach first maketh a proof whether it can concoct them. And the like happeneth after surfeits, or milk in too great quantity.

37. A second cause is mordication of the orifices of the parts; especially of the mesentery veins; as it is seen, that salt, or any such thing that is sharp and biting, put in the fundament, doth provoke the part to expel; and mustard provoketh sneezing: and any sharp thing to the eyes provoketh tears. And therefore we see that almost all purgers have a kind of twitching and vellication, besides the griping which cometh of wind. And if this mordication be in an over-high degree, it is little better than the corrosion of poison; and it cometh to pass sometimes in antimony, especially if it be given to bodies not replete with humours; for where humours abound, the humours save the parts.

38. The third cause is attraction: for I do not deny, but that purging medicines have in them a direct force of attraction: as drawing plaisters have in surgery: and we see sage or betony bruised, sneezing powder, and other powders, or liquors, which the physicians call "errhines," put into the nose, draw phlegm and water from the head; and so it is in apophlegmatisms and gargarisms, that draw the rheum down by the palate. And by this virtue, no doubt, some purgers draw more one humour, and some another, according to the opinion received: as rhubarb draweth choler; sena melancholy; agaric phlegm, &c. but yet, more or less, they draw promiscuously. And note also, that besides sympathy between the purger and the humour, there is also another cause why some medicines draw some humour more than another. And it is, for that some medicines work quicker than others: and they that draw quick, draw only the lighter and more fluid humours; and they that draw slow, work upon the more tough and viscous humours.

And therefore men must beware how they take rhubarb, and the like, alone familiarly; for it taketh only the lightest part of the humour away, and leaveth the mass of humours more obstinate. And the like may be said of wormwood, which is so much magnified.

39. The fourth cause is flatuosity; for wind stirred moveth to expel: and we find that in effect all purgers have in them a raw spirit or wind; which is the principal cause of tortion in the stomach and belly. And therefore purgers lose, most of them, the virtue by decoction upon the fire; and for that cause are given chiefly in infusion, juice, or powder.

40. The fifth cause is compression or crushing; as when water is crushed out of a sponge: so we see that taking cold moveth looseness by contraction of the skin and outward parts; and so doth cold likewise cause rheums, and defluxions from the head; and some astringent plaisters crush out purulent matter. This kind of operation is not found in many medicines; myrobolanes have it; and it may be the barks of peaches; for this virtue requireth an astriction; but such an astriction as is not grateful to the body; for a pleasing astriction doth rather bind in the humours than expel them: and therefore, such astriction is found in things of a harsh taste.

41. The sixth cause is lubrefaction and relaxation. As we see in medicines emollient; such as are milk, honey, mallows, lettuce, mercurial, pellitory of the wall, and others. There is also a secret virtue of relaxation in cold: for the heat of the body bindeth the parts and humours together, which cold relaxeth: as it is seen in urine, blood, pottage, or the like; which, if they be cold, break and dissolve. And by this kind of relaxation, fear looseneth the belly: because the heat retiring inwards towards the heart, the guts, and other parts are relaxed; in the same manner as fear also causeth trembling in the sinews. And of this kind of purgers are some medicines made of mercury.

42. The seventh cause is abstersion; which is plainly a scouring off, or incision of the more viscous humours, and making the humours more fluid; and cutting between them and the part; as is found in nitrous water, which scoureth linen cloth speedily from the foulness. But this incision must be by a sharpness, without astriction: which we find in salt, wormwood, oxymel, and the like.

43. There be medicines that move stools, and not urine; some other, urine, and not stools. Those that purge by stool are such as enter not at all, or little, into the mesentery vein: but either at the first are not digestible by the stomach, and therefore move immediately downwards to the guts; or else are afterwards rejected by the mesentery veins, and so turn likewise downwards to the guts; and of these two kinds are most purgers. But those that move urine are such as are well digested of the stomach, and well received also of the mesentery veins; so they come as far as the liver, which sendeth urine to the bladder, as the whey of blood: and those medicines being opening and piercing do fortify the operation of the liver, in sending down the wheyey part of the blood to the reins. For medicines urinative do not work by rejection and indigestion, as solutive do.

44. There be divers medicines, which in greater quantity move stool, and in smaller urine: and so contrariwise, some that in greater quantity move urine, and in smaller stool. Of the former sort is rhubarb, and some others. The cause is, for that rhubarb is a medicine which the stomach in a small quantity doth digest and overcome, being not flatuous nor loathsome, and so sendeth it to the mesentery veins; and so being opening it helpeth down urine: but in a greater quantity, the stomach cannot overcome it, and so it goeth to the guts. Pepper by some of the ancients is noted to be of the second sort; which being in small quantity, moveth wind in the stomach and guts, and so expelleth by stool; but being in greater quantity, dissipateth the wind; and itself getteth to the mesentery veins, and so to the liver and reins; where, by heating and opening, it sendeth down urine more plentifully.

Experiments in consort touching meats and drinks that are most nourishing.

45. We have spoken of evacuating of the body: we will now speak something of the filling of it, by restoratives in consumptions and emaciating diseases. In vegetables, there is one part that is more nourishing than another; as grains and roots nourish more than the leaves; insomuch as the order of the Foliatanes was put down by the pope, as finding leaves unable to nourish man's body. Whether there be that difference in the flesh of living creatures is not well inquired, as whether livers, and other entrails be not more nourishing than the outward flesh. We find that amongst the Romans, a goose's liver was a great delicacy; insomuch as they had artificial means to make it fair and great; but whether it were more nourishing appeareth not. It is certain, that marrow is more nourishing than fat. And I conceive that some decoction of bones and sinews, stamped and well strained, would be a very nourishing broth: we find also that Scotch skinck, which is a pottage of strong nourishment, is made with the knees and sinews of beef, but long boiled: jelly also, which they use for a restorative, is chiefly made of knuckles of veal. The pulp that is within the crawfish or crab, which they spice and butter, is more nourishing than the flesh of the crab or crawfish. The yolks of eggs are clearly more nourishing than the whites. So that it should seem, that the parts of living creatures that lie more inwards, nourish more than the outward

flesh; except it be the brain: which the spirits prey too much upon, to leave it any great virtue of nourishing. It seemeth for the nourishing of aged men, or men in consumptions, some such thing should be devised, as should be half chylus, before it be put into the stomach.

46. Take two large capons; parboil them upon a soft fire, by the space of an hour or more, till in effect all the blood is gone. Add in the decoction the pill of a sweet lemon, or a good part of the pill of a citron, and a little mace. Cut off the shanks, and throw them away. Then with a good strong chopping-knife mince the two capons, bones and all, as small as ordinary minced meat; put them into a large neat boulter; then take a kilderkin sweet and well seasoned, of four gallons of beer, of 8s. strength, new as it cometh from the tunning: make in the kilderkin a great bung-hole of purpose: then thrust into it the boulter, in which the capons are, drawn out in length; let it steep in it three days and three nights, the bung-hole open to work, then close the bung-hole, and so let it continue a day and half; then draw it into bottles, and you may drink it well after three days' bottling; and it will last six weeks: approved. It drinketh fresh, flowereth and mantleth exceedingly; it drinketh not newish at all; it is an excellent drink for a consumption, to be drunk either alone, or carded with some other beer. It quencheth thirst, and hath no whit of windiness. Note, that it is not possible, that meat and bread, either in broths, or taken with drink, as is used, should get forth into the veins and outward parts so finely and easily as when it is thus incorporate, and made almost a chylus aforehand.

47. Trial would be made of the like brew with potatoe roots, or burr roots, or the pith of artichokes, which are nourishing meats: it may be tried also with other flesh; as pheasant, partridge, young pork, pig, venison, especially of young deer, &c.

48. A mortress made with the brawn of capons, stamped and strained, and mingled, after it is made, with like quantity, at the least, of almond butter, is an excellent meat to nourish those that are weak; better than blanckmanger, or jelly: and so is the cullice of cocks, boiled thick with the like mixture of almond butter; for the mortress or cullice, of itself, is more savoury and strong, and not so fit for nourishing of weak bodies; but the almonds, that are not of so high a taste as flesh, do excellently qualify it.

49. Indian maiz hath, of certain, an excellent spirit of nourishment; but it must be throughly boiled, and made into a maiz-cream like a barley-cream. I judge the same of rice, made into a cream; for rice is in Turkey, and other countries of the east, most fed upon; but it must be thoroughly boiled in respect of the hardness of it, and also because otherwise it bindeth the body too much.

50. Pistachoes, so they be good, and not musty, joined with almonds in almond milk; or made into a milk of themselves, like unto almond milk, but more green, are an excellent nourisher: but you shall do well to add a little ginger, scraped, because they are not without some subtile windiness.

51. Milk warm from the cow is found to be a great nourisher, and a good remedy in consumptions: but then you must put into it, when you milk the cow, two little bags; the one of powder of mint, the other of powder of red roses; for they keep the milk somewhat from turning or curdling in the stomach; and put in sugar also, for the same cause, and hardly for the taste's sake; but you must drink a good draught, that it may stay less time in the stomach, lest it curdle: and let the cup into which you milk the cow, be set in a greater cup of hot water, that you may take it warm. And cow milk thus prepared, I judge to be better for a consumption than ass milk, which, it is true, turneth not so easily, but it is a little harsh; marry it is more proper for sharpness of urine, and exulceration of the bladder, and all manner of lenifying. Woman's milk likewise is prescribed, when all fail; but I commend it not, as being a little too near the juice of man's body, to be a good nourisher; except it be in infants, to whom it is natural.

52. Oil of sweet almonds, newly drawn, with sugar and a little spice, spread upon bread toasted, is an excellent nourisher: but then to keep the oil from frying in the stomach, you must drink a good draught of mild beer after it; and to keep it from relaxing the stomach too much, you must put in a little powder of cinnamon.

53. The yolks of eggs are of themselves so well prepared by nature for nourishment, as, so they be poached, or reare boiled, they need no other preparation or mixture; yet they may be taken also raw, when they are new laid, with Malmsey, or sweet wine: you shall do well to put in some few slices of eryngium roots, and a little ambergrice; for by this means, besides the immediate faculty of nourishment, such drink will strengthen the back, so that it will not draw down the urine too fast; for too much urine doth always hinder nourishment.

54. Mincing of meat, as in pies, and buttered minced meat, saveth the grinding of the teeth; and therefore, no doubt, it is more nourishing, especially in age, or to them that have weak teeth; but the butter is not so proper for weak bodies; and therefore it were good to moisten it with a little claret wine, pill of lemon or orange, cut small, sugar, and a very little cinnamon or nutmeg. As for chuets, which are likewise minced meat, instead of butter and fat, it were good to moisten them, partly with cream, or almond, or pistacho milk: or barley, or maiz-cream; adding a little coriander seed and caraway seed, and a

very fine saffron. The more full handling of alimentation we reserve to the due place.

We have hitherto handled the particulars which yield best, and easiest, and plentifullest nourishment; and now we will speak of the best means of conveying and converting the nourishment.

55. The first means is to procure that the nourishment may not be rubbed and drawn away; wherein that which we have already said is very material; to provide that the reins draw not too strongly an over great part of the blood into urine. To this add that precept of Aristotle, that wine be forborne in all consumptions; for that the spirits of the wine do prey upon the roscid juice of the body, and inter-common with the spirits of the body, and so deceive and rob them of their nourishment. And therefore, if the consumption, growing from the weakness of the stomach, do force you to use wine, let it always be burnt, that the quicker spirits may evaporate; or, at the least, quenched with two little wedges of gold, six or seven times repeated. Add also this provision, that there be not too much expense of the nourishment, by exhaling and sweating; and therefore if the patient be apt to sweat, it must be gently restrained. But chiefly Hippocrates's rule is to be followed, who adviseth quite contrary to that which is in use: namely, that the linen or garment next the flesh be, in winter, dry and oft changed; and in summer seldom changed, and smeared over with oil; for certain it is, that any substance that is fat, doth a little fill the pores of the body, and stay sweat in some degree: but the more cleanly way is, to have the linen smeared lightly over with oil of sweet almonds; and not to forbear shifting as oft as is fit.

56. The second means is, to send forth the nourishment into the parts more strongly; for which the working must be by strengthening of the stomach; and in this, because the stomach is chiefly comforted by wine and hot things, which otherwise hurt, it is good to resort to outward applications to the stomach: Wherein it hath been tried, that the quilts of roses, spices, mastic, wormwood, mint, &c. are nothing so helpful, as to take a cake of new bread, and to bedew it with a little sack, or Alicant, and to dry it, and after it be dried a little before the fire, to put it within a clean napkin, and to lay it to the stomach; for it is certain, that all flour hath a potent virtue of astriction; in so much as it hardeneth a piece of flesh, or a flower, that is laid in it: and therefore a bag quilted with bran is likewise very good; but it drieth somewhat too much, and therefore it must not lie long.

57. The third means, which may be a branch of the former, is to send forth the nourishment the better by sleep. For we see, that bears, and other creatures that sleep in the winter, wax exceeding fat: and certain it is, as it is commonly believed that sleep doth nourish much, both for that the spirits do less spend the nourishment in sleep, than when living creatures are awake, and because, that which is to the present purpose, it helpeth to thrust out the nourishment into the parts. Therefore in aged men, and weak bodies, and such as abound not with choler, a short sleep after dinner doth help to nourish; for in such bodies there is no fear of an over-hasty digestion, which is the inconvenience of postmeridian sleeps. Sleep also in the morning, after the taking of somewhat of easy digestion, as milk from the cow, nourishing broth, or the like, doth further nourishment: but this would be done sitting upright, that the milk or broth may pass the more speedily to the bottom of the stomach.

58. The fourth means is, to provide that the parts themselves may draw to them the nourishment strongly. There is an excellent observation of Aristotle; that a great reason, why plants, some of them, are of greater age than living creatures, is, for that they yearly put forth new leaves and boughs: whereas living creatures put forth after their period of growth, nothing that is young, but hair and nails, which are excrements, and no parts. And it is most certain, that whatsoever is young, doth draw nourishment better than that which is old; and then, that which is the mystery of that observation, young boughs, and leaves, calling the sap up to them, the same nourisheth the body in the passage. And this we see notably proved also, in that the oft cutting, or polling of hedges, trees, and herbs, doth conduce much to their lasting. Transfer therefore this observation to the helping of nourishment in living creatures: the noblest and principal use whereof is, for the prolongation of life; restoration of some degree of youth, and inteneration of the parts; for certain it is, that there are in living creatures parts that nourish and repair easily, and parts that nourish and repair hardly; and you must refresh and renew those that are easy to nourish, that the other may be refreshed, and as it were, drink in nourishment in the passage. Now we see that draught oxen, put into good pasture, recover the flesh of young beef; and men after long emaciating diets wax plump and fat, and almost new: so that you may surely conclude, that the frequent and wise use of those emaciating diets, and of purgings, and perhaps of some kind of bleeding, is a principal means of prolongation of life, and restoring some degree of youth; for as we have often said, death cometh upon living creatures like the torment of Mezentius:

> Mortua quin etiam jungebat corpora vivis
> Componens manibusque manus, atque oribus ora.
> Æn. viii. 485.

For the parts in man's body easily reparable, as spirits, blood, and flesh, die in the embracement of the parts hardly reparable, as bones, nerves, and membranes; and likewise some entrails, which they reckon amongst the spermatical parts, are

hard to repair: though that division of spermatical and menstrual parts be but a conceit. And this same observation also may be drawn to the present purpose of nourishing emaciated bodies: and therefore gentle frication draweth forth the nourishment, by making the parts a little hungry, and heating them; whereby they call forth nourishment the better. This frication I wish to be done in the morning. It is also best done by the hand, or a piece of scarlet wool, wet a little with the oil of almonds, mingled with a small quantity of bay-salt, or saffron: we see that the very currying of horses doth make them fat, and in good liking.

59. The fifth means is, to further the very act of assimilation of nourishment; which is done by some outward emolliments, that make the parts more apt to assimilate. For which I have compounded an ointment of excellent odour, which I call Roman ointment; vide the receipt. The use of it would be between sleeps; for in the latter sleep the parts assimilate chiefly.

Experiment solitary touching "Filum medicinale."

60. There be many medicines, which by themselves would do no cure, but perhaps hurt; but being applied in a certain order, one after another, do great cures. I have tried, myself, a remedy for the gout, which hath seldom failed, but driven it away in twenty-four hours space: it is first to apply a poultis, of which vide the receipt, and then a bath, or fomentation, of which vide the receipt; and then a plaister, vide the receipt. The poultis relaxeth the pores, and maketh the humour apt to exhale. The fomentation calleth forth the humour by vapours; but yet in regard of the way made by the poultis, draweth gently; and therefore draweth the humour out, and doth not draw more to it; for it is a gentle fomentation, and hath withal a mixture, though very little, of some stupefactive. The plaister is a moderate astringent plaister, which repelleth new humour from falling. The poultis alone would make the part more soft and weak, and apter to take the defluxion and impression of the humour. The fomentation alone, if it were too weak, without way made by the poultis, would draw forth little; if too strong, it would draw to the part, as well as draw from it. The plaister alone would pen the humour already contained in the part, and so exasperate it, as well as forbid new humour. Therefore they must be all taken in order, as is said. The poultis is to be laid to for two or three hours: the fomentation for a quarter of an hour, or somewhat better, being used hot, and seven or eight times repeated: the plaister to continue on still, till the part be well confirmed.

Experiment solitary touching cure by custom.

61. There is a secret way of cure, unpractised, by assuetude of that which in itself hurteth. Poisons have been made, by some, familiar, as hath been said. Ordinary keepers of the sick of the plague are seldom infected. Enduring of tortures, by custom, hath been made more easy: the brooking of enormous quantity of meats, and so of wine or strong drink, hath been, by custom, made to be without surfeit or drunkenness. And generally, diseases that are chronical, as coughs, phthisics, some kinds of palsies, lunacies, &c. are most dangerous at the first: therefore a wise physician will consider whether a disease be incurable; or whether the just cure of it be not full of peril; and if he find it to be such, let him resort to palliation; and alleviate the symptom, without busying himself too much with the perfect cure: and many times, if the patient be indeed patient, that course will exceed all expectation. Likewise the patient himself may strive, by little and little, to overcome the symptom in the acerbation, and so, by time, turn suffering into nature.

Experiment solitary touching cure by excess.

62. Divers diseases, especially chronical, such as quartan agues, are sometimes cured by surfeit and excesses: as excess of meat, excess of drink, extraordinary stirring or lassitude, and the like. The cause is, for that diseases of continuance get an adventitious strength from custom, besides their material cause from the humours; so that the breaking of the custom doth leave them only to their first cause; which if it be any thing weak will fall off. Besides, such excesses do excite and spur nature, which thereupon rises more forcibly against the disease.

Experiment solitary touching cure by motion of consent.

63. There is in the body of man a great consent in the motion of the several parts. We see, it is children's sport, to prove whether they can rub upon their breast with one hand, and pat upon their forehead with another; and straightways they shall sometimes rub with both hands, or pat with both hands. We see, that when the spirits that come to the nostrils expel a bad scent, the stomach is ready to expel by vomit. We find that in consumptions of the lungs, when nature cannot expel by cough, men fall into fluxes of the belly, and then they die. So in pestilent diseases, if they cannot be expelled by sweat, they fall likewise into looseness; and that is commonly mortal. Therefore physicians should ingeniously contrive, how, by emotions that are in their power, they may excite inward motions that are not in their power: as by the stench of feathers, or the like, they cure the rising of the mother.

Experiment solitary touching cure of diseases which are contrary to predisposition.

64. Hippocrates's aphorism, "in morbis minus," is a good profound aphorism. It importeth, that diseases, contrary to the complexion, age, sex, season of the year, diet, &c. are more dangerous than

those that are concurrent. A man would think it should be otherwise; for that, when the accident of sickness, and the natural disposition, do second the one the other, the disease should be more forcible: and so, no doubt, it is, if you suppose like quantity of matter. But that which maketh good the aphorism is, because such diseases do show a greater collection of matter, by that they are able to overcome those natural inclinations to the contrary. And therefore in diseases of that kind, let the physician apply himself more to purgation than to alteration; because the offence is in the quantity; and the qualities are rectified of themselves.

Experiment solitary touching preparations before purging, and settling of the body afterwards.

65. Physicians do wisely prescribe, that there be preparatives used before just purgations; for certain it is, that purgers do many times great hurt, if the body be not accommodated, both before and after the purging. The hurt that they do, for want of preparation before purging, is by the sticking of the humours, and their not coming fair away, which causeth in the body great perturbations and ill accidents during the purging; and also the diminishing and dulling of the working of the medicine itself, that it purgeth not sufficiently: therefore the work of preparation is double; to make the humours fluid and mature, and to make the passages more open: for both those help to make the humours pass readily. And for the former of these, syrups are most profitable: and for the latter, apozemes, or preparing broths; clysters also help, lest the medicine stop in the guts, and work gripingly. But it is true, that bodies abounding with humours, and fat bodies, and open weather, are preparatives in themselves; because they make the humours more fluid. But let a physician beware, how he purge after hard frosty weather, and in a lean body, without preparation. For the hurt that they may do after purging, it is caused by the lodging of some humours in ill places: for it is certain, that there be humours, which somewhere placed in the body are quiet, and do little hurt; in other places, especially passages, do much mischief. Therefore it is good, after purging, to use apozemes and broths, not so much opening as those used before purging; but abstersive and mundifying clysters also are good to conclude with, to draw away the relics of the humours, that may have descended to the lower region of the body.

Experiment solitary touching stanching of blood.

66. Blood is stanched divers ways. First, by astringents, and repercussive medicines. Secondly, by drawing of the spirits and blood inwards, which is done by cold, as iron or a stone laid to the neck doth stanch the bleeding of the nose; also it hath been tried, that the testicles being put into sharp vinegar, hath made a sudden recess of the spirits, and stanched blood. Thirdly, by the recess of the blood by sympathy. So it hath been tried, that the part that bleedeth, being thrust into the body of a capon or sheep, new ript and bleeding, hath stanched blood, as it seemeth, sucking and drawing up, by similitude of substance, the blood it meeteth with, and so itself going back. Fourthly, by custom and time; so the Prince of Orange, in his first hurt by the Spanish boy, could find no means to stanch the blood either by medicine or ligament: but was fain to have the orifice of the wound stopped by mens' thumbs, succeeding one another, for the space at the least of two days; and at the last the blood by custom only retired. There is a fifth way also in use, to let blood in an adverse part, for a revulsion.

Experiment solitary touching change of aliments and medicines.

67. It helpeth, both in medicine and aliment, to change and not to continue the same medicine and aliment still. The cause is, for that nature, by continual use of any thing, groweth to a satiety and dullness, either of appetite or working. And we see that assuetude of things hurtful doth make them lose their force to hurt; as poison, which with use some have brought themselves to brook. And therefore it is no marvel, though things helpful by custom lose their force to help: I count intermission almost the same thing with change; for that that hath been intermitted is after a sort new.

Experiment solitary touching diets.

68. It is found by experience, that in diets of guaiacum, sarza, and the like, especially if they be strict, the patient is more troubled in the beginning than after continuance; which hath made some of the more delicate sort of patients give them over in the midst; supposing that if those diets trouble them so much at first, they shall not be able to endure them to the end. But the cause is, for that all those diets do dry up humours, rheums, and the like; and they cannot dry up until they have first attenuated; and while the humour is attenuated, it is more fluid than it was before, and troubleth the body a great deal more, until it be dried up and consumed. And therefore patients must expect a due time, and not kick at them at the first.

Experiments in consort touching the production of cold.

The producing of cold is a thing very worthy the inquisition; both for use and disclosure of causes. For heat and cold are nature's two hands, whereby she chiefly worketh; and heat we have in readiness, in respect of the fire; but for cold we must stay till it cometh, or seek it in deep caves, or high mountains: and when all is done,

we cannot obtain it in any great degree: for furnaces of fire are far hotter than a summer's sun; but vaults or hills are not much colder than a winter's frost.

69. The first means of producing cold, is that which nature presenteth us withal: namely, the expiring of cold out of the inward parts of the earth in winter, when the sun hath no power to overcome it; the earth being, as hath been noted by some, "primum frigidum." This hath been asserted, as well by ancient as by modern philosophers: it was the tenet of Parménides. It was the opinion of the author of the discourse in Plutarch, for I take it that book was not Plutarch's own, "De primo frigido." It was the opinion of Telesius, who hath renewed the philosophy of Parmenides, and is the best of the novelists.

70. The second cause of cold is the contact of cold bodies; for cold is active and transitive into bodies adjacent, as well as heat: which is seen in those things that are touched with snow or cold water. And therefore, whosoever will be an inquirer into nature, let him resort to a conservatory of snow and ice, such as they use for delicacy to cool wine in summer; which is a poor and contemptible use, in respect of other uses, that may be made of such conservatories.

71. The third cause is the primary nature of all tangible bodies: for it is well to be noted, that all things whatsoever, tangible, are of themselves cold; except they have an accessary heat by fire, life, or motion: for even the spirit of wine, or chemical oils, which are so hot in operation, are to the first touch cold; and air itself compressed, and condensed a little by blowing, is cold.

72. The fourth cause is the density of the body; for all dense bodies are colder than most other bodies, as metals, stone, glass, and they are longer in heating than softer bodies. And it is certain, that earth, dense, tangible, hold all of the nature of cold. The cause is, for that all matters tangible being cold, it must needs follow, that where the matter is most congregate, the cold is the greater.

73. The fifth cause of cold, or rather of increase and vehemency of cold, is a quick spirit enclosed in a cold body: as will appear to any that shall attentively consider of nature in many instances. We see nitre, which hath a quick spirit, is cold; more cold to the tongue than a stone; so water is colder than oil, because it hath a quicker spirit: for all oil, though it hath the tangible parts better digested than water, yet hath it a duller spirit: so snow is colder than water, because it hath more spirit within it: so we see that salt put to ice, as in the producing of artificial ice, increaseth the activity of cold: so some "insecta," which have spirit of life, as snakes and silk-worms, are to the touch cold: so quicksilver is the coldest of metals, because it is fullest of spirit.

74. The sixth cause of cold is the chasing and driving away of spirits such as have some degree of heat: for the banishing of the heat must needs leave any body cold. This we see in the operation of opium and stupefactives upon the spirits of living creatures: and it were not amiss to try opium, by laying it upon the top of a weather-glass, to see whether it will contract the air; but I doubt it will not succeed; for besides that the virtue of opium will hardly penetrate through such a body as glass, I conceive that opium, and the like, make the spirits fly rather by malignity, than by cold.

75. Seventhly, the same effect must follow upon the exhaling or drawing out of the warm spirits, that doth upon the flight of the spirits. There is an opinion that the moon is magnetical of heat, as the sun is of cold and moisture: it were not amiss therefore to try it, with warm waters; the one exposed to the beams of the moon, the other with some screen betwixt the beams of the moon and the water, as we use to the sun for shade: and to see whether the former will cool sooner. And it were also good to inquire, what other means there may be to draw forth the exile heat which is in the air; for that may be a secret of great power to produce cold weather.

Experiments in consort, touching the version and transmutation of air into water.

We have formerly set down the means of turning air into water, in the experiment 27. But because it is "magnale naturæ," and tendeth to the subduing of a very great effect, and is also of manifold use, we will add some instances in consort that give light thereunto.

76. It is reported by some of the ancients, that sailors have used, every night, to hang fleeces of wool on the sides of their ships, the wool towards the water; and that they have crushed fresh water out of them, in the morning for their use. And thus much we have tried, that a quantity of wool tied loose together, being let down into a deep well, and hanging in the middle, some three fathom from the water, for a night, in the winter time; increased in weight, as I now remember, to a fifth part.

77. It is reported by one of the ancients, that in Lydia, near Pergamus, there were certain workmen in time of wars fled into caves; and the mouth of the caves being stopped by the enemies, they were famished. But long time after the dead bones were found; and some vessels which they had carried with them; and the vessels full of water; and that water thicker, and more towards ice, than common water: which is a notable instance of condensation and induration by burial under earth, in caves, for long time: and of version also, as it should seem, of air into water; if any of those vessels were empty. Try therefore a small bladder hung in snow, and the

like in nitre, and the like in quicksilver: and if you find the bladders fallen or shrunk, you may be sure the air is condensed by the cold of those bodies, as it would be in a cave under earth.

78. It is reported of very good credit, that in the East Indies, if you set a tub of water open in a room where cloves are kept, it will be drawn dry in twenty-four hours; though it stand at some distance from the cloves. In the country, they use many times in deceit, when their wool is new shorn, to set some pails of water by in the same room, to increase the weight of the wool. But it may be, that the heat of the wool, remaining from the body of the sheep, or the heat gathered by the lying close of the wool, helpeth to draw the watery vapour: but that is nothing to the version.

79. It is reported also credibly, that wool new shorn, being laid casually upon a vessel of verjuice, after some time, had drunk up a great part of the verjuice, though the vessel were whole without any flaw, and had not the bung-hole open. In this instance, there is upon the by, to be noted, the percolation or suing of the verjuice through the wood; for verjuice of itself would never have passed through the wood: so as, it seemeth, it must be first in a kind of vapour before it pass.

80. It is especially to be noted, that the cause that doth facilitate the version of air into water, when the air is not in gross, but subtilly mingled with tangible bodies, is, as hath been partly touched before, for that tangible bodies have an antipathy with air; and if they find any liquid body that is more dense near them, they will draw it: and after they have drawn it, they will condense it more, and in effect incorporate it; for we see that a sponge, or wool, or sugar, or a woollen cloth, being put but in part in water or wine, will draw the liquor higher, and beyond the place where the water or wine cometh. We see also, that wood, lute strings, and the like, do swell in moist seasons; as appeareth by the breaking of the strings, the hard turning of the pegs, and the hard drawing forth of boxes, and opening of wainscot doors: which is a kind of infusion: and is much like to an infusion in water, which will make wood to swell; as we see in the filling of the chops of bowls, by laying them in water. But for that part of these experiments which concerneth attraction, we will reserve it to the proper title of attraction.

81. There is also a version of air into water seen in the sweating of marbles and other stones; and of wainscot before, and in moist weather. This must be, either by some moisture the body yieldeth, or else by the moist air thickened against the hard body. But it is plain, that it is the latter; for that we see wood painted with oil-colour, will sooner gather drops in a moist night, than wood alone, which is caused by the smoothness and closeness, which letteth in no part of the vapour, and so turneth it back, and thickeneth it into dew. We see also, that breathing upon a glass, or smooth body, giveth a dew; and in frosty mornings, such as we call rime frosts, you shall find drops of dew upon the inside of glass windows; and the frost itself upon the ground is but a version or condensation of the moist vapours of the night, into a watery substance: dews likewise, and rain, are but the returns of moist vapours condensed; the dew, by the cold only of the sun's departure, which is the gentler cold; rains, by the cold of that which they call the middle region of the air; which is the more violent cold.

82. It is very probable, as hath been touched, that that which will turn water into ice, will likewise turn air some degree nearer unto water. Therefore try the experiment of the artificial turning water into ice, whereof we shall speak in another place, with air in place of water, and the ice about it. And although it be a greater alteration to turn air into water, than water into ice; yet there is this hope, that by continuing the air longer time, the effect will follow: for that artificial conversion of water into ice is the work of a few hours; and this of air may be tried by a month's space or the like.

Experiments in consort touching induration of bodies.

Induration, or lapidification of substances more soft, is likewise another degree of condensation; and is a great alteration in nature. The effecting and accelerating thereof is very worthy to be inquired. It is effected by three means. The first is by cold; whose property is to condense and constipate, as hath been said. The second is by heat; which is not proper but by consequence; for the heat doth attenuate; and by attenuation doth send forth the spirit and moister part of a body; and upon that, the more gross of the tangible parts do contract and sear themselves together; both to avoid "vacuum," as they call it, and also to munite themselves against the force of the fire, which they have suffered. And the third is by assimilation; when a hard body assimilateth a soft, being contiguous to it.

The examples of induration, taking them promiscuously, are many: as the generation of stones within the earth, which at the first are but rude earth or clay: and so of minerals, which come, no doubt, at first of juices concrete, which afterwards indurate: and so of porcelain, which is an artificial cement, buried in the earth a long time; and so the making of brick and tile: also the making of glass of a certain sand and brake-roots, and some other matters; also the exudations of rock-diamonds and crystal, which harden with time; also the induration of bead-amber, which at first is a soft substance; as appeareth by the flies and spiders which are found in it;

and many more: but we will speak of them distinctly.

83. For indurations by cold, there be few trials of it; for we have no strong or intense cold here on the surface of the earth, so near the beams of the sun, and the heavens. The likeliest trial is by snow and ice; for as snow and ice, especially being holpen and their cold activated by nitre or salt, will turn water into ice, and that in a few hours; so it may be, it will turn wood or stiff clay into stone, in longer time. Put therefore into a conserving pit of snow and ice, adding some quantity of salt and nitre, a piece of wood, or a piece of tough clay, and let it lie a month or more.

84. Another trial is by metalline waters, which have virtual cold in them. Put therefore wood or clay into smith's water, or other metalline water, and try whether it will not harden in some reasonable time. But I understand it of metalline waters that come by washing or quenching; and not of strong waters that come by dissolution; for they are too corrosive to consolidate.

85. It is already found that there are some natural spring waters, that will inlapidate wood; so that you shall see one piece of wood, whereof the part above the water shall continue wood; and the part under water shall be turned into a kind of gravelly stone. It is likely those waters are of some metalline mixture; but there would be more particular inquiry made of them. It is certain, that an egg was found, having lain many years in the bottom of a moat, where the earth had somewhat overgrown it; and this egg was come to the hardness of a stone, and had the colours of the white and yolk perfect, and the shell shining in small grains like sugar or alabaster.

86. Another experience there is of induration by cold, which is already found; which is, that metals themselves are hardened by often heating and quenching in cold water; for cold ever worketh most potently upon heat precedent.

87. For induration by heat, it must be considered, that heat, by the exhaling of the moister parts, doth either harden the body, as in bricks, tiles, &c., or if the heat be more fierce, maketh the grosser part itself run and melt; as in the making of ordinary glass; and in the vitrification of earth, as we see in the inner parts of furnaces, and in the vitrification of brick, and of metals. And in the former of these, which is the hardening by baking without melting, the heat hath these degrees; first, it indurateth, and then maketh fragile; and lastly it doth incinerate and calcinate.

88. But if you desire to make an induration with toughness, and less fragility, a middle way would be taken, which is that which Aristotle hath well noted; but would be thoroughly verified. It is to decoct bodies in water for two or three days; but they must be such bodies into which the water will not enter; as stone and metal; for if they be bodies into which the water will enter, then long seething will rather soften than indurate them; as hath been tried in eggs, &c. therefore softer bodies must be put into bottles hung into water seething with the mouths open above the water, that no water may get in; for by this means the virtual heat of the water will enter; and such a heat, as will not make the body adust or fragile; but the substance of the water will be shut out. This experiment we made; and it sorted thus. It was tried with a piece of freestone, and with pewter, put into the water at large. The freestone we found received in some water; for it was softer and easier to scrape than a piece of the same stone kept dry. But the pewter, into which no water could enter, became more white, and like to silver, and less flexible by much. There were also put into an earthen bottle, placed as before, a good pellet of clay, a piece of cheese, a piece of chalk, and a piece of freestone. The clay came forth almost of the hardness of stone; the cheese likewise very hard, and not well to be cut; the chalk and the freestone much harder than they were. The colour of the clay inclined not a whit to the colour of brick, but rather to white, as in ordinary drying by the sun. Note, that all the former trials were made by a boiling upon a good hot fire, renewing the water as it consumed, with other hot water; but the boiling was but for twelve hours only; and it is like that the experiment would have been effectual, if the boiling had been for two or three days, as we prescribed before.

89. As touching assimilation, for this is a degree of assimilation, even in inanimate bodies we see examples of it in some stones in clay-grounds, lying near to the top of the earth, where pebble is; in which you may manifestly see divers pebbles gathered together, and crust of cement or stone between them, as hard as the pebbles themselves; and it were good to make a trial of purpose, by taking clay, and putting in it divers pebble stones, thick set, to see whether in continuance of time, it will not be harder than other clay of the same lump, in which no pebbles are set. We see also in ruins of old walls, especially towards the bottom, the mortar will become as hard as the brick; we see also, that the wood on the sides of vessels of wine, gathereth a crust of tartar, harder than the wood itself; and scales likewise grow to the teeth, harder than the teeth themselves.

90. Most of all, induration by assimilation appeareth in the bodies of trees and living creatures: for no nourishment that the tree receiveth, or that the living creature receiveth, is so hard as wood, bone, or horn, &c. but is indurated after by assimilation.

Experiment solitary touching the version of water into air.

91. The eye of the understanding is like the eye of the sense: for as you may see great ob

jects through small crannies, or levels; so you may see great axioms of nature through small and contemptible instances. The speedy depredation of air upon watery moisture, and version of the same into air, appeareth in nothing more visible, than in the sudden discharge or vanishing of a little cloud of breath or vapour from glass, or the blade of a sword, or any such polished body, such as doth not at all detain or imbibe the moisture; for the mistiness scattereth and breaketh up suddenly. But the like cloud, if it were oily or fatty, will not discharge; not because it sticketh faster; but because air preyeth upon water; and flame and fire upon oil; and therefore to take out a spot of grease they use a coal upon brown paper; because fire worketh upon grease or oil, as air doth upon water. And we see paper oiled, or wood oiled, or the like, last long moist; but wet with water, dry, or putrify sooner. The cause is, for that air meddleth little with the moisture of oil.

Experiment solitary touching the force of union.

92. There is an admirable demonstration in the same trifling instance of the little cloud upon glass, or gems, or blades of swords, of the force of union, even in the least quantities, and weakest bodies, how much it conduceth to preservation of the present form and the resisting of a new. For mark well the discharge of that cloud; and you shall see it ever break up, first in the skirts, and last in the midst. We see likewise, that much water draweth forth the juice of the body infused; but little water is imbibed by the body: and this is a principal cause, why in operation upon bodies for their version or alteration, the trial in great quantities doth not answer the trial in small; and so deceiveth many; for that, I say, the greater body resisteth more any alteration of form, and requireth far greater strength in the active body that should subdue it.

Experiment solitary touching the producing of feathers and hairs of divers colours.

93. We have spoken before in the fifth instance, of the cause of orient colours in birds; which is by the fineness of the strainer: we will now endeavour to reduce the same axiom to a work. For this writing of our "Sylva Sylvarum" is, to speak properly, not natural history, but a high kind of natural magic. For it is not a description only of nature, but a breaking of nature into great and strange works. Try therefore the anointing over of pigeons, or some other birds, when they are but in their down; or of whelps, cutting their hair as short as may be; or of some other beast: with some ointment that is not hurtful to the flesh, and that will harden and stick very close; and see whether it will not alter the colours of the feathers or hair. It is received, that the pulling off the first feathers of birds clean, will make the new come forth white: and it is certain that white is a penurious colour, and where moisture is scant. So blue violets, and other flowers, if they be starved, turn pale and white: birds and horses, by age or scars turn white: and the hoar hairs of men come by the same reason. And therefore, in birds, it is very likely, that the feathers that come first, will be many times of divers colours, according to the nature of the bird, for that the skin is more porous; but when the skin is more shut and close, the feathers will come white. This is a good experiment, not only for the producing of birds and beasts of strange colours; but also for the disclosure of the nature of colours themselves: which of them require a finer porosity, and which a grosser.

Experiment solitary touching the nourishment of living creatures before they be brought forth.

94. It is a work of providence, that hath been truly observed by some, that the yolk of the egg conduceth little to the generation of the bird, but only to the nourishment of the same; for if a chicken be opened, when it is new hatched, you shall find much of the yolk remaining. And it is needful, that birds that are shaped without the female's womb have in the egg, as well matter of nourishment, as matter of generation for the body. For after the egg is laid, and severed from the body of the hen, it hath no more nourishment from the hen, but only a quickening heat when she sitteth. But beasts and men need not the matter of nourishment within themselves, because they are shaped within the womb of the female, and are nourished continually from her body.

Experiments in consort touching sympathy and antipathy for medicinal use.

95. It is an inveterate and received opinion, that cantharides applied to any part of the body, touch the bladder and exulcerate it, if they stay on long. It is likewise received, that a kind of stone, which they bring out of the West Indies, hath a peculiar force to move gravel, and to dissolve the stone; insomuch, as laid but to the wrist, it hath so forcibly sent down gravel, as men have been glad to remove it, it was so violent.

96. It is received, and confirmed by daily experience, that the soles of the feet have great affinity with the head and mouth of the stomach; as we see going wet-shod, to those that use it not, affecteth both: applications of hot powders to the feet attenuate first, and after dry the rheum: and therefore a physician that would be mystical, prescribeth, for the cure of the rheum, that a man should walk continually upon a camomile alley; meaning, that he should put camomile within his socks. Likewise pigeons bleeding, applied to the soles of the feet ease the head: and soporiferous medicines applied unto them, provoke sleep.

97. It seemeth, that as the feet have a sympathy with the head, so the wrists and hands have

a sympathy with the heart; we see the effects and passions of the heart and spirits are notably disclosed by the pulse: and it is often tried, that juices of stockgillyflowers, rose-campian, garlick, and other things, applied to the wrists, and renewed, have cured long agues. And I conceive, that washing with certain liquors the palms of the hands doth much good: and they do well in heats of agues, to hold in the hands eggs of alabaster and balls of crystal.

Of these things we shall speak more, when we handle the title of sympathy and antipathy, in the proper place.

Experiment solitary touching the secret processes of nature.

98. The knowledge of man hitherto hath been determined by the view or sight; so that whatsoever is invisible, either in respect of the fineness of the body itself, or the smallness of the parts, or of the subtility of the motion, is little inquired. And yet these be the things that govern nature principally; and without which you cannot make any true analysis and indication of the proceedings of nature. The spirits or pneumaticals, that are in all tangible bodies, are scarce known. Sometimes they take them for "vacuum;" whereas they are the most active of bodies. Sometimes they take them for air; from which they differ exceedingly, as much as wine from water; and as wood from earth. Sometimes they will have them to be natural heat, or a portion of the element of fire; whereas some of them are crude and cold. And sometimes they will have them to be the virtues and qualities of the tangible parts which they see; whereas they are things by themselves. And then, when they come to plants and living creatures, they call them souls. And such superficial speculations they have; like prospectives, that show things inward, when they are but paintings. Neither is this a question of words, but infinitely material in nature. For spirits are nothing else but a natural body rarified to a proportion, and included in the tangible parts of bodies, as in an integument. And they be no less differing one from the other than the dense or tangible parts; and they are in all tangible bodies whatsoever, more or less; and they are never almost at rest; and from them, and their motions, principally proceed arefaction, colliquation, concoction, maturation, putrefaction, vivification, and most of the effects of nature: for, as we have figured them in our "Sapientia Veterum," in the fable of Proserpina, you shall in the infernal regiment hear little doings of Pluto, but most of Proserpina: for tangible parts in bodies are stupid things; and the spirits do in effect all. As for the differences of tangible parts in bodies, the industry of the chymist hath given some light, in discerning by their separations the oily, crude, pure, impure, fine, gross parts of bodies, and the like. And the physicians are content to acknowledge, that herbs and drugs have divers parts; as that opium hath a stupefactive part, and a heating part; the one moving sleep, the other a sweat following; and that rhubarb hath purging parts, and astringent parts, &c. But this whole inquisition is weakly and negligently handled. And for the more subtile differences of the minute parts, and the posture of them in the body, which also hath great effects, they are not at all touched: as for the motions of the minute parts of bodies, which do so great effects, they have not been observed at all; because they are invisible, and incur not to the eye; but yet they are to be deprehended by experience: as Democritus said well, when they charged him to hold, that the world was made of such little motes, as were seen in the sun: "Atomus," saith he, "necessitate rationis et experientiæ esse convincitur; atomum enim nemo unquam vidit." And therefore the tumult in the parts of solid bodies, when they are compressed, which is the cause of all flight of bodies through the air, and of other mechanical motions, as hath been partly touched before, and shall be throughly handled in due place, is not seen at all. But nevertheless, if you know it not, or inquire it not attentively and diligently, you shall never be able to discern, and much less to produce, a number of mechanical motions. Again, as to the motions corporal, within the inclosures of bodies, whereby the effects, which were mentioned before, pass between the spirits and the tangible parts, which are arefaction, colliquation, concoction, maturation, &c. they are not at all handled. But they are put off by the names of virtues, and natures, and actions, and passions, and such other logical words.

Experiment solitary touching the power of heat.

99. It is certain, that of all powers in nature heat is the chief; both in the frame of nature, and in the works of art. Certain it is, likewise, that the effects of heat are most advanced, when it worketh upon a body without loss or dissipation of the matter; for that ever betrayeth the account. And therefore it is true, that the power of heat is best perceived in distillations which are performed in close vessels and receptacles. But yet there is a higher degree; for howsoever distillations do keep the body in cells and cloisters, without going abroad, yet they give space unto bodies to turn into vapour; to return into liquor, and to separate one part from another. So as nature doth expatiate, although it hath not full liberty: whereby the true and ultime operations of heat are not attained. But if bodies may be altered by heat, and yet no such reciprocation of rarefaction, and of condensation, and of separation, admitted, then it is like that this Proteus of matter, being held by the sleeves, will turn and change into many metamorphoses. Take therefore a square vessel of iron,

in form of a cube, and let it have good thick and strong sides. Put into it a cube of wood, that may fill it as close as may be, and let it have a cover of iron, as strong at least as the sides, and let it be well luted, after the manner of the chymists. Then place the vessel within burning coals, kept quick kindled for some few hours' space. Then take the vessel from the fire, and take off the cover, and see what is become of the wood. I conceive, that since all inflammation and evaporation are utterly prohibited, and the body still turned upon itself, that one of these two effects will follow: either that the body of the wood will be turned into a kind of "amalgama," as the chymists call it, or that the finer part will be turned into air, and the grosser stick as it were baked, and incrustate upon the sides of the vessel, being become of a denser matter than the wood itself crude. And for another trial, take also water, and put it in the like vessel, stopped as before, but use a gentler heat, and remove the vessel sometimes from the fire; and again, after some small time, when it is cold, renew the heating of it; and repeat this alteration some few times: and if you can once bring to pass, that the water, which is one of the simplest of bodies, be changed in colour, odour, or taste, after the manner of compound bodies, you may be sure that there is a great work wrought in nature, and a notable entrance made into strange changes of bodies and productions; and also a way made to do that by fire, in small time, which the sun and age do in long time. But of the admirable effects of this distillation in close, (for so we call it,) which is like the wombs and matrices of living creatures, where nothing expireth nor separateth, we will speak fully, in the due place; not that we aim at the making of Paracelsus's pygmies, or any such prodigious follies; but that we know the effects of heat will be such, as will scarce fall under the conceit of man, if the force of it be altogether kept in.

Experiment solitary touching the impossibility of annihilation.

100. There is nothing more certain in nature than that it is impossible for any body to be utterly annihilated; but that as it was the work of the omnipotency of God to make somewhat of nothing, so it requireth the like omnipotency to turn somewhat into nothing. And therefore it is well said by an obscure writer of the sect of the chymists, that there is no such way to effect the strange transmutations of bodies, as to endeavour and urge by all means the reducing of them to nothing. And herein is contained also a great secret of preservation of bodies from change; for if you can prohibit, that they neither turn into air, because no air cometh to them, nor go into the bodies adjacent, because they are utterly heterogeneal; nor make a round and circulation within themselves; they will never change though they be in their nature never so perishable or mutable. We see how flies, and spiders, and the like, get a sepulchre in amber, more durable than the monument and embalming of the body of any king. And I conceive the like will be of bodies put into quicksilver. But then they must be but thin, as a leaf, or a piece of paper or parchment; for if they have a greater crassitude, they will alter in their own body, though they spend not. But of this we shall speak more when we handle the title of conservation of bodies.

CENTURY II.

Experiments in consort touching music.

MUSIC, in the practice hath been well pursued, and in good variety; but in the theory, and especially in the yielding of the causes of the practice, very weakly; being reduced into certain mystical subtilties of no use and not much truth. We shall, therefore, after our manner, join the contemplative and active part together.

101. All sounds are either musical sounds, which we call tones; whereunto there may be a harmony; which sounds are ever equal; as singing, the sounds of stringed and wind instruments, the ringing of bells, &c.; or immusical sounds, which are ever unequal; such as are the voice in speaking, all whisperings, all voices of beasts and birds, except they be singing-birds, all percussions of stones, wood, parchment, skins, as in drums, and infinite others.

102. The sounds that produce tones are ever from such bodies as are in their parts and pores equal; as well as the sounds themselves are equal; and such are the percussions of metal, as in bells; of glass, as in the filliping of a drinking glass; of air, as in men's voices whilst they sing, in pipes, whistles, organs, stringed instruments, &c.; and of water, as in the nightingale pipes of regals, or organs, and other hydraulics; which the ancients had, and Nero did so much esteem, but are now lost. And if any man think, that the string of the bow and the string of the viol are neither of them equal bodies, and yet produce tones, he is in an error. For the sound is not created between the bow or "plectrum" and the string; but between the string and the air; no more than it is between the finger or quill, and the string in other instruments. So there are, in

effect, but three percussions that create tones; percussions of metals, comprehending glass and the like, percussions of air, and percussions of water.

103. The diapason or eighth in music is the sweetest concord, insomuch as it is in effect a unison; as we see in lutes that are strung in the base strings with two strings, one an eighth above another; which make but as one sound. And every eighth note in ascent, as from eight to fifteen, from fifteen to twenty-two, and so in "infinitum," are but scales of diapason. The cause is dark, and hath not been rendered by any; and therefore would be better contemplated. It seemeth that air, which is the subject of sounds, in sounds that are not tones, which are all unequal, as hath been said, admitteth much variety; as we see in the voices of living creatures, and likewise in the voices of several men, for we are capable to discern several men, by their voices, and in the conjugation of letters, whence articulate sounds proceed; which of all others are most various. But in the sounds which we call tones, that are ever equal, the air is not able to cast itself into any such variety; but is forced to recur into one and the same posture or figure, only differing in greatness and smallness. So we see figures may be made of lines, crooked and straight, in infinite variety, where there is inequality; but circles, or squares, or triangles equilateral, which are all figures of equal lines, can differ but in greater or lesser.

104. It is to be noted, the rather least any man should think that there is any thing in this number of eight, to create the diapason, that this computation of eight is a thing rather received, than any true computation. For a true computation ought ever to be by distribution into equal portions. Now there be intervenient in the rise of eight, in tones, two beemolls, or half notes: so as if you divide the tones equally, the eight is but seven whole and equal notes; and if you subdivide that into half notes, as it is in the stops of a lute, it maketh the number of thirteen.

105. Yet this is true, that in the ordinary rises and falls of the voice of man, not measuring the tone by whole notes, and half-notes, which is the equal measure, there fall out to be two beemolls, as hath been said, between the unison and the diapason: and this varying is natural. For if a man would endeavour to raise or fall his voice, still by half-notes, like the stops of a lute; or by whole notes alone without halves, as far as an eighth; he will not be able to frame his voice unto it. Which showeth, that after every three whole notes, nature requireth, for all harmonical use, one half-note to be interposed.

106. It is to be considered, that whatsoever virtue is in numbers, for conducing to consent of notes, is rather to be ascribed to the ante-number, than to the entire number; as namely, that the sound returneth after six or after twelve; so that the seventh or the thirteenth is not the matter, but the six or the twelfth; and the seventh and the thirteenth are but the limits and boundaries of the return.

107. The concords in music which are perfect or semiperfect, between the unison and the diapason, are the fifth, which is the most perfect; the third next: and the sixth, which is more harsh: and, as the ancients esteemed, and so do myself and some other yet, the fourth, which they call diatessaron. As for the tenth, twelfth, thirteenth, and so in "infinitum," they be but recurrences of the former, viz. of the third, the fifth, and the sixth; being an eighth respectively from them.

108. For discords, the second and the seventh are of all others the most odious in harmony, to the sense; whereof the one is next above the unison, the other next under the diapason: which may show that harmony requireth a competent distance of notes.

109. In harmony, if there be not a discord to the base, it doth not disturb the harmony, though there be a discord to the higher parts: so the discord be not of the two that are odious; and therefore the ordinary consent of four parts consisteth of an eighth, a fifth, and a third to the base; but that fifth is a fourth to the treble, and the third is a sixth. And the cause is, for that the base striking more air, doth overcome and drown the treble, unless the discord be very odious; and so hideth a small imperfection. For we see, that in one of the lower strings of a lute, there soundeth not the sound of the treble, nor any mixed sound, but only the sound of the base.

110. We have no music of quarter-notes; and it may be they are not capable of harmony; for we see the half-notes themselves do but interpose sometimes. Nevertheless we have some slides or relishes of the voice or strings, as it were continued without notes, from one tone to another, rising or falling, which are delightful.

111. The causes of that which is pleasing or ingrate to the hearing, may receive light by that which is pleasing or ingrate to the sight. There be two things pleasing to the sight, leaving pictures and shapes aside, which are but secondary objects; and please or displease but in memory; these two are colours and orders. The pleasing of colour symbolizeth with the pleasing of any single tone to the ear; but the pleasing of order doth symbolize with harmony. And therefore we see in garden-knots, and the frets of houses, and all equal and well answering figures, as globes, pyramids, cones, cylinders, &c. how they please; whereas unequal figures are but deformities. And both these pleasures, that of the eye, and that of the ear, are but the effects of equality, good proportion, or correspondence; so that, out of question, equality and correspondence are the causes of harmony. But to find the

proportion of that correspondence is more abstruse; whereof notwithstanding we shall speak somewhat, when we handle tones, in the general inquiry of sounds.

112. Tones are not so apt altogether to procure sleep as some other sounds; as the wind, the purling of water, humming of bees, a sweet voice of one that readeth, &c. The cause whereof is, for that tones, because they are equal and slide not, do more strike and erect the sense than the other. And overmuch attention hindereth sleep.

113. There be in music certain figures or tropes, almost agreeing with the figures of rhetoric, and with the affections of the mind, and other senses. First, the division and quavering, which please so much in music, have an agreement with the glittering of light; as the moon-beams playing upon a wave. Again, the falling from a discord to a concord, which maketh great sweetness in music, hath an agreement with the affections, which are reintegrated to the better, after some dislikes; it agreeth also with the taste, which is soon glutted with that which is sweet alone. The sliding from the close or cadence hath an agreement with the figure in rhetoric, which they call "præter expectatum;" for there is a pleasure even in being deceived. The reports, and fuges, have an agreement with the figures in rhetoric of repetition and traduction. The triplas, and changing of times, have an agreement with the changes of motions; as when galliard time, and measure time, are in the medley of one dance.

114. It hath been anciently held and observed, that the sense of hearing, and the kinds of music, have most operation upon manners; as, to encourage men, and make them warlike; to make them soft and effeminate; to make them grave; to make them light; to make them gentle and inclined to pity, &c. The cause is, for that the sense of hearing striketh the spirits more immediately than the other senses; and more incorporeally than the smelling; for the sight, taste, and feeling, have their organs not of so present and immediate access to the spirits as the hearing hath. And as for the smelling, which indeed worketh also immediately upon the spirits, and is forcible while the object remaineth, it is with a communication of the breath or vapour of the object odorate; but harmony entering easily, and mingling not at all, and coming with a manifest motion, doth by custom of often affecting the spirits, and putting them into one kind of posture, alter not a little the nature of the spirits, even when the object is removed. And therefore we see, that tunes and airs, even in their own nature, have in themselves some affinity with the affections; as there be merry tunes, doleful tunes, solemn tunes; tunes inclining men's minds to pity; warlike tunes, &c. So as it is no marvel if they alter the spirits, considering that tunes have a predisposition to the motion of the spirits in themselves. But yet it hath been noted, that though this variety of tunes doth dispose the spirits to variety of passions, conform unto them, yet generally music feedeth that disposition of the spirits, which it findeth. We see also, that several airs and tunes do please several nations and persons, according to the sympathy they have with their spirits.

Experiments in consort touching sounds; and first touching the nullity and entity of sounds.

Perspective hath been with some diligence inquired; and so hath the nature of sounds, in some sort, as far as concerneth music: but the nature of sounds in general hath been superficially observed. It is one of the subtilest pieces of nature. And besides, I practise, as I do advise; which is, after long inquiry of things immersed in matter, to interpose some subject which is immateriate, or less materiate; such as this of sounds; to the end, that the intellect may be rectified, and become not partial.

115. It is first to be considered, what great motions there are in nature, which pass without sound or noise. The heavens turn about in a most rapid motion, without noise to us perceived; though in some dreams they have been said to make an excellent music. So the motions of the comets, and fiery meteors, as "stella cadens," &c., yield no noise. And if it be thought that it is the greatness of distance from us, whereby the sound cannot be heard; we see that lightnings and coruscations, which are near at hand, yield no sound neither: and yet in all these there is a percussion and division of the air The winds in the upper region, which move the clouds above, which we call the rack, and are not perceived below, pass without noise. The lower winds, in a plain, except they be strong, make no noise; but amongst trees, the noise of such winds will be perceived. And the winds, generally, when they make a noise, do ever make it unequally, rising and falling, and sometimes, when they are vehement, trembling at the height of their blast. Rain or hail falling, though vehemently, yieldeth no noise in passing through the air, till it fall upon the ground, water, houses, or the like. Water in a river, though a swift stream, is not heard in the channel, but runneth in silence, if it be of any depth; but the very stream upon shallows, of gravel or pebble, will be heard. And waters, when they beat upon the shore, or are straitened, as in the falls of bridges, or are dashed against themselves, by winds, give a roaring noise. Any piece of timber, or hard body, being thrust forwards by another body contiguous, without knocking, giveth no noise And so bodies in weighing one upon another, though the upper body press the lower body down, make no noise. So the motion in the minute parts of any solid body, which is the

principal cause of violent motion, though unobserved, passeth without sound; for that sound that is heard sometimes is produced only by the breaking of the air, and not by the impulsion of the parts. So it is manifest, that where the anterior body giveth way, as fast as the posterior cometh on, it maketh no noise, be the motion never so great or swift.

116. Air open, and at large maketh no noise, except it be sharply percussed; as in the sound of a string, where air is percussed by a hard and stiff body, and with a sharp loose: for if the string be not strained, it maketh no noise. But where the air is pent and straitened, there breath or other blowing, which carry but a gentle percussion, suffice to create sound; as in pipes and wind-instruments. But then you must note, that in recorders, which go with a gentle breath, the concave of the pipe, were it not for the fipple that straiteneth the air, much more than the simple concave, would yield no sound. For as for other wind-instruments, they require a forcible breath; as trumpets, cornets, hunters' horns, &c., which appeareth by the blown cheeks of him that windeth them. Organs also are blown with a strong wind by the bellows. And note again, that some kind of wind-instruments are blown at a small hole in the side, which straiteneth the breath at the first entrance; the rather, in respect of the traverse and stop above the hole, which performeth the fipple's part; as it is seen in flutes and fifes, which will not give sound by a blast at the end, as recorders, &c., do. Likewise in all whistling, you contract the mouth; and to make it more sharp, men sometimes use their finger. But in open air, if you throw a stone or a dart, they give no sound; no more do bullets, except they happen to be a little hollowed in the casting; which hollowness penneth the air: nor yet arrows, except they be rufled in their feathers, which likewise penneth the air. As for small whistles or shepherds' oaten pipes, they give a sound because of their extreme slenderness, whereby the air is more pent than in a wider pipe. Again, the voices of men and living creatures pass through the throat, which penneth the breath. As for the Jews-harp, it is a sharp percussion; and besides, hath the advantage of penning the air in the mouth.

117. Solid bodies, if they be very softly percussed, give no sound; as when a man treadeth very softly upon boards. So chests or doors in fair weather, when they open easily, give no sound. And cart-wheels squeak not when they are liquored.

118. The flame of tapers or candles, though it be a swift motion and breaketh the air, yet passeth without sound. Air in ovens, though, no doubt, it doth, as it were, boil and dilate itself, and is repercussed; yet it is without noise.

119. Flame percussed by air giveth a noise; as in blowing of the fire by bellows; greater than if the bellows should blow upon the air itself. And so likewise flame percussing the air strongly, as when flame suddenly taketh and openeth, giveth a noise; so great flames, while the one impelleth the other, give a bellowing sound.

120. There is a conceit runneth abroad, that there should be a white powder, which will discharge a piece without noise; which is a dangerous experiment if it should be true: for it may cause secret murders. But it seemeth to me impossible; for if the air pent be driven forth, and strike the air open, it will certainly make a noise. As for the white powder, if any such thing be, that may extinguish or dead the noise, it is like to be a mixture of petre and sulphur, without coal. For petre alone will not take fire. And if any man think that the sound may be extinguished or deaded by discharging the pent air, before it cometh to the mouth of the piece and to the open air, that is not probable; for it will make more divided sounds: as if you should make a cross-barrel hollow through the barrel of a piece, it may be it would give several sounds, both at the nose, and at the sides. But I conceive, that if it were possible to bring to pass, that there should be no air pent at the mouth of the piece, the bullet might fly with small or no noise: For first, it is certain, there is no noise in the percussion of the flame upon the bullet. Next, the bullet, in piercing through the air, maketh no noise as hath been said. And then, if there be no pent air that striketh upon open air, there is no cause of noise; and yet the flying of the bullet will not be stayed. For that motion, as hath been oft said, is in the parts of the bullet, and not in the air. So as trial must be made by taking some small concave of metal, no more than you mean to fill with powder, and laying the bullet in the mouth of it, half out into the open air.

121. I heard it affirmed by a man that was a great dealer in secrets, he was but vain, that there was a conspiracy, which himself hindered, to have killed Queen Mary, sister to Queen Elizabeth, by a burning-glass, when she walked in St. James's park, from the leads of the house. But thus much, no doubt, is true; that if burning-glasses could be brought to a great strength, as they talk generally of burning-glasses that are able to burn a navy, the percussion of the air alone, by such a burning-glass, would make no noise: no more than is found in coruscations and lightnings without thunders.

122. I suppose, that impression of the air with sounds asketh a time to be conveyed to the sense, as well as the impressing of species visible; or else they will not be heard. And therefore, as the bullet moveth so swift that it is invisible; so the same swiftness of motion maketh it inaudible:

for we see, that the apprehension of the eye is quicker than that of the ear.

123. All eruptions of air, though small and slight, give an entity of sound, which we call crackling, puffing, spitting, &c. as in bay-salt, and bay-leaves, cast into the fire; so in chestnuts, when they leap forth of the ashes; so in green wood laid upon the fire, especially root; so in candles, that spit flame if they be wet; so in rasping, sneezing, &c. so in a rose leaf gathered together into the fashion of a purse, and broken upon the forehead, or back of the hand, as children use.

Experiments in consort touching production, conservation, and delation of sounds; and the office of the air therein.

124. The cause given of sound, that it should be an elision of the air, whereby if they mean any thing, they mean a cutting or dividing, or else an attenuating of the air, is but a term of ignorance; and the notion is but a catch of the wit upon a few instances; as the manner is in the philosophy received. And it is common with men, that if they have gotten a pretty expression by a word of art, that expression goeth current; though it be empty of matter. This conceit of elision appeareth most manifestly to be false, in that the sound of a bell, string, or the like, continueth melting some time after the percussion; but ceaseth straightways, if the bell, or string, be touched and stayed: whereas, if it were the elision of the air that made the sound, it could not be that the touch of the bell or string should extinguish so suddenly that motion caused by the elision of the air. This appeareth yet more manifestly by chiming with a hammer upon the outside of a bell: for the sound will be according to the inward concave of the bell; whereas the elision or attenuation of the air cannot be but only between the hammer and the outside of the bell. So again, if it were an elision, a broad hammer, and a bodkin, struck upon metal, would give a diverse tone, as well as a diverse loudness: but they do not so; for though the sound of the one be louder, and of the other softer, yet the tone is the same. Besides, in echoes, whereof some are as loud as the original voice, there is no new elision, but a repercussion only. But that which convinceth it most of all is, that sounds are generated where there is no air at all. But these and the like conceits, when men have cleared their understanding by the light of experience, will scatter and break up like a mist.

125. It is certain, that sound is not produced at the first, but with some local motion of the air, or flame, or some other medium; nor yet without some resistance, either in the air or the body percussed. For if there be a mere yielding or cession, it produceth no sound; as hath been said. And therein sounds differ from light and colours, which pass through the air, or other bodies, without any local motion of the air; either at the first, or after. But you must attentively distinguish between the local motion of the air, which is but "vehiculum causæ," a carrier of the sounds, and the sounds themselves, conveyed in the air. For as to the former, we see manifestly that no sound is produced, no not by air itself against other air, as in organs, &c. but with a perceptible blast of the air; and with some resistance of the air struckeen. For even all speech, which is one of the gentlest motions of the air, is with expulsion of a little breath. And all pipes have a blast, as well as a sound. We see also manifestly, that sounds are carried with wind: and therefore sounds will be heard further with the wind, than against the wind; and likewise do rise and fall with the intension or remission of the wind. But for the impression of the sound, it is quite another thing, and is utterly without any local motion of the air, perceptible; and in that resembleth the species visible: for after a man hath lured, or a bell is rung, we cannot discern any perceptible motion at all in the air along as the sound goeth; but only at the first. Neither doth the wind, as far as it carrieth a voice, with the motion thereof, confound any of the delicate and articulate figurations of the air, in variety of words. And if a man speak a good loudness against the flame of a candle, it will not make it tremble much; though most when those letters are pronounced which contract the mouth; as F. S. V. and some others. But gentle breathing, or blowing without speaking, will move the candle far more. And it is the more probable, that sound is without any local motion of the air, because as it differeth from the sight, in that it needeth a local motion of the air at first; so it paralleleth in so many other things with the sight, and radiation of things visible; which without all question induce no local motion in the air, as hath been said.

126. Nevertheless it is true, that upon the noise of thunder, and great ordnance, glass windows will shake; and fishes are thought to be frayed with the motion caused by noise upon the water. But these effects are from the local motion of the air, which is a concomitant of the sound, as hath been said, and not from the sound.

127. It hath been anciently reported, and is still received, that extreme applauses and shouting of people assembled in great multitudes, have so rarified and broken the air that birds flying over have fallen down, the air being not able to support them. And it is believed by some, that great ringing of bells in populous cities hath chased away thunder; and also dissipated pestilent air: all which may be also from the concussion of the air, and not from the sound.

128. A very great sound, near hand, hath strucken many deaf; and at the instant they have found, as it were, the breaking of a skin or parch-

ment in their ear: and myself standing near one that lured loud and shrill, had suddenly an offence, as if somewhat had broken or been dislocated in my ear; and immediately after a loud ringing, not an ordinary singing or hissing, but far louder and differing, so as I feared some deafness. But after some half quarter of an hour it vanished. This effect may be truly referred unto the sound: for as is commonly received, an overpotent object doth destroy the sense; and spiritual species, both visible and audible, will work upon the sensories, though they move not any other body.

129. In delation of sounds, the enclosure of them preserveth them, and causeth them to be heard further. And we find in rolls of parchment or trunks, the mouth being laid to the one end of the roll of parchment or trunk, and the ear to the other, the sound is heard much farther than in the open air. The cause is, for that the sound spendeth, and is dissipated in the open air; but in such concaves it is conserved and contracted. So also in a piece of ordnance, if you speak in the touchhole, and another lay his ear to the mouth of the piece, the sound passeth and is far better heard than in the open air.

130. It is further to be considered, how it proveth and worketh when the sound is not enclosed all the length of its way, but passeth partly through open air; as where you speak some distance from a trunk; or where the ear is some distance from the trunk at the other end; or where both mouth and ear are distant from the trunk. And it is tried, that in a long trunk of some eight or ten foot, the sound is holpen, though both the mouth and the ear be a handful or more from the ends of the trunk; and somewhat more holpen, when the ear of the hearer is near, than when the mouth of the speaker. And it is certain, that the voice is better heard in a chamber from abroad, than abroad from within the chamber.

131. As the enclosure that is round about and entire, preserveth the sound; so doth a semi-concave, though in a less degree. And therefore, if you divide a trunk, or a cane into two, and one speak at the one end, and you lay your ear at the other, it will carry the voice farther than in the air at large. Nay further, if it be not a full semiconcave, but if you do the like upon the mast of a ship, or a long pole, or a piece of ordnance, though one speak upon the surface of the ordnance, and not at any of the bores, the voice will be heard farther than in the air at large.

132. It would be tried, how, and with what proportion of disadvantage the voice will be carried in a horn, which is a line arched; or in a trumpet, which is a line retorted; or in some pipe that were sinuous.

133. It is certain, howsoever it cross the received opinion, that sounds may be created without air, though air be the most favourable deferent of sounds. Take a vessel of water, and knap a pair of tongs some depth within the water, and you shall hear the sound of the tongs well and not much diminished; and yet there is no air at all present.

134. Take one vessel of silver, and another of wood, and fill each of them full of water, and then knap the tongs together, as before, about a handful from the bottom, and you shall find the sound much more resounding from the vessel of silver than from that of wood: and yet if there be no water in the vessel, so that you knap the tongs in the air, you shall find no difference between the silver and the wooden vessel. Whereby, beside the main point of creating sound without air, you may collect two things: the one, that the sound communicateth with the bottom of the vessel; the other, that such a communication passeth far better through water than air.

135. Strike any hard bodies together in the midst of a flame; and you shall hear the sound with little difference from the sound in the air.

136. The pneumatical part which is in all tangible bodies, and hath some affinity with the air, performeth, in some degree, the parts of the air; as when you knock upon an empty barrel, the sound is in part created by the air on the outside; and in part by the air in the inside: for the sound will be greater or lesser as the barrel is more empty or more full; but yet the sound participateth also with the spirit in the wood through which it passeth, from the outside to the inside: and so it cometh to pass in the chiming of bells on the outside; where also the sound passeth to the inside: and a number of other like instances, whereof we shall speak more when we handle the communication of sounds.

137. It were extreme grossness to think, as we have partly touched before, that the sound in strings is made or produced between the hand and the string, or the quill and the string, or the bow and the string, for those are but "vehicula motus," passages to the creation of the sound, the sound being produced between the string and the air; and that not by any impulsion of the air from the first motion of the string; but by the return or result of the string, which was strained by the touch, to his former place: which motion of result is quick and sharp; whereas the first motion is soft and dull. So the bow tortureth the string continually, and thereby holdeth it in a continual trepidation.

Experiments in consort touching the magnitude and exility and damps of sounds.

138. Take a trunk, and let one whistle at the one end, and hold your ear at the other, and you shall find the sound strike so sharp as you can scarce endure it. The cause is, for that sound diffuseth itself in round, and so spendeth itself; but if the sound, which would scatter in open air, be made to go all into a canal, it must needs give

greater force to the sound. And so you may note, that enclosures do not only preserve sound, but also increase and sharpen it.

139. A hunter's horn being greater at one end than at the other, doth increase the sound more than if the horn were all of an equal bore. The cause is, for that the air and sound being first contracted at the lesser end, and afterwards having more room to spread at the greater end, to dilate themselves; and in coming out strike more air; whereby the sound is the greater and baser. And even hunter's horns, which are sometimes made straight, and not oblique, are ever greater at the lower end. It would be tried also in pipes, being made far larger at the lower end; or being made with a belly towards the lower end, and then issuing into a straight concave again.

140. There is in St. James's fields a conduit of brick, unto which joineth a low vault; and at the end of that a round house of stone; and in the brick conduit there is a window; and in the round house a slit or rift of some little breadth: if you cry out in the rift, it will make a fearful roaring at the window. The cause is the same with the former; for that all concaves, that proceed from more narrow to more broad, do amplify the sound at the coming out.

141. Hawks' bells, that have holes in the sides, give a greater ring, than if the pellet did strike upon brass in the open air. The cause is the same with the first instance of the trunk; namely, for that the sound enclosed with the sides of the bell cometh forth at the holes unspent and more strong.

142. In drums, the closeness round about, that preserveth the sound from dispersing, maketh the noise come forth at the drum-hole far more loud and strong than if you should strike upon the like skin extended in the open air. The cause is the same with the two precedent.

143. Sounds are better heard, and farther off, in an evening or in the night, than at the noon or in the day. The cause is, for that in the day, when the air is more thin, no doubt, the sound pierceth better; but when the air is more thick, as in the night, the sound spendeth and spreadeth abroad less: and so it is a degree of enclosure. As for the night, it is true also that the general silence helpeth.

144. There be two kinds of reflections of sound; the one at distance, which is the echo; wherein the original is heard distinctly, and the reflection also distinctly; of which we shall speak hereafter: the other in concurrence; when the sound reflecting, the reflection being near at hand, returneth immediately upon the original, and so iterateth it not, but amplifieth it. Therefore we see, that music upon the water soundeth more; and so likewise music is better in chambers wainscotted than hanged.

145. The strings of a lute, or viol, or virginals, do give a far greater sound, by reason of the knot, and board, and concave underneath, than if there were nothing but only the flat of a board, without that hollow and knot, to let in the upper air into the lower. The cause is the communication of the upper air with the lower, and penning of both from expense or dispersing.

146. An Irish harp hath open air on both sides of the strings: and it hath the concave or belly not along the strings, but at the end of the strings. It maketh a more resounding sound than a bandora, orpharion, or citter, which have likewise wire strings. I judge the cause to be, for that open air on both sides helpeth, so that there be a concave; which is therefore best placed at the end.

147. In a virginal, when the lid is down, it maketh a more exile sound than when the lid is open. The cause is, for that all shutting in of air, where there is no competent vent, dampeth the sound: which maintaineth likewise the former instance; for the belly of the lute or viol doth pen the air somewhat.

148. There is a church at Gloucester, and, as I have heard, the like is in some other places, where if you speak against a wall softly, another shall hear your voice better a good way off, than near at hand. Inquire more particularly of the frame of that place. I suppose there is some vault, or hollow, or aisle, behind the wall, and some passage to it towards the farther end of that wall against which you speak; so as the voice of him that speaketh slideth along the wall, and then entereth at some passage, and communicateth with the air of the hollow; for it is preserved somewhat by the plain wall; but that is too weak to give a sound audible, till it hath communicated with the back air.

149. Strike upon a bow-string, and lay the horn of the bow near your ear, and it will increase the sound, and make a degree of a tone. The cause is, for that the sensory, by reason of the close holding, is percussed before the air dispereth. The like is, if you hold the horn betwixt your teeth: but that is a plain delation of the sound from the teeth to the instrument of hearing; for there is a great intercourse between those two parts; as appeareth by this, that a harsh grating tune setteth the teeth on edge. The like falleth out, if the horn of the bow be put upon the temples; but that is but the slide of the sound from thence to the ear.

150. If you take a rod of iron or brass, and hold the one end to your ear, and strike upon the other, it maketh a far greater sound than the like stroke upon the rod, made not so contiguous to the ear. By which, and by some other instances that have been partly touched, it should appear, that sounds do not only slide upon the surface of a smooth body, but do also communicate with the spirits, that are in the pores of the body.

151. I remember in Trinity College in Cam-

bridge, there was an upper chamber, which being thought weak in the roof, it was supported by a pillar of iron of the bigness of one's arm in the midst of the chamber; which if you had struck, it would make a little flat noise in the room where it was struck, but it would make a great bomb in the chamber beneath.

152. The sound which is made by buckets in a well, when they touch upon the water, or when they strike upon the side of the well, or when two buckets dash the one against the other, these sounds are deeper and fuller than if the like percussion were made in the open air. The cause is the penning and enclosure of the air in the concave of the well.

153. Barrels placed in a room under the floor of a chamber make all noises in the same chamber more full and resounding.

So that there be five ways, in general, of majoration of sounds: enclosure simple; enclosure with dilatation; communication; reflection concurrent; and approach to the sensory.

154. For exility of the voice or other sounds; it is certain that the voice doth pass through solid and hard bodies if they be not too thick: and through water, which is likewise a very close body, and such a one as letteth not in air. But then the voice, or other sound, is reduced by such passage to a great weakness or exility. If therefore you stop the holes of a hawk's bell, it will make no ring, but a flat noise or rattle. And so doth the "aëtites" or eagle-stone, which hath a little stone within it.

155. And as for water, it is a certain trial: let a man go into a bath, and take a pail, and turn the bottom upwards, and carry the mouth of it even, down to the level of the water, and so press it down under the water some handful and a half, still keeping it even that it may not tilt on either side, and so the air get out: then let him that is in the bath dive with his head so far under water, as he may put his head into the pail, and there will come as much air bubbling forth as will make room for his head. Then let him speak, and any that shall stand without shall hear his voice plainly; but yet made extreme sharp and exile, like the voice of puppets: but yet the articulate sounds of the words will not be confounded. Note, that it may be much more handsomely done, if the pail be put over the man's head above the water, and then he cower down, and the pail be pressed down with him. Note, that a man must kneel or sit, that he may be lower than the water. A man would think that the Sicilian poet had knowledge of this experiment; for he said, that Hercules's page, Hylas, went with a water-pot to fill it at a pleasant fountain that was near the shore, and that the nymph of the fountain fell in love with the boy, and pulled him under water, keeping him alive; and that Hercules missing his page, called him by his name aloud, that all the shore rang of it; and that Hylas from within the water answered his master, but, that which is to the present purpose, with so small and exile a voice, as Hercules thought he had been three miles off, when the fountain, indeed, was fast by.

156. In lutes and instruments of strings, if you stop a string high, whereby it hath less scope to tremble, the sound is more treble, but yet more dead.

157. Take two saucers, and strike the edge of the one against the bottom of the other, within a pail of water; and you shall find, that as you put the saucers lower and lower, the sound groweth more flat; even while part of the saucer is above the water; but that flatness of sound is joined with a harshness of sound; which no doubt is caused by the inequality of the sound which cometh from the part of the saucer under water, and from the part above. But when the saucer is wholly under water, the sound becometh more clear, but far more low, and as if the sound came from afar off.

158. A soft body dampeth the sound much more than a hard; as if a bell hath cloth or silk wrapped about it, it deadeth the sound more than if it were wood. And therefore in clericals the keys are lined; and in colleges they use to line tablemen.

159. Trial was made in a recorder after these several manners. The bottom of it was set against the palm of the hand; stopped with wax round about; set against a damask cushion; thrust into sand; into ashes; into water, half an inch under the water; close to the bottom of a silver basin; and still the tone remained: but the bottom of it was set against a woollen carpet; a lining of plush; a lock of wool, though loosely put in; against snow; and the sound of it was quite deaded, and but breath.

160. Iron hot produceth not so full a sound as when it is cold, for while it is hot, it appeareth to be more soft and less resounding. So likewise warm water, when it falleth, maketh not so full a sound as cold, and I conceive it is softer, and nearer the nature of oil, for it is more slippery, as may be perceived in that it scoureth better.

161. Let there be a recorder made with two fipples, at each end one: the trunk of it of the length of two recorders, and the holes answerable towards each end, and let two play the same lesson upon it as in unison; and let it be noted whether the sound be confounded, or amplified, or dulled. So likewise let a cross be made of two trunks, throughout, hollow, and let two speak, or sing, the one longways, the other traverse; and let two hear at the opposite ends, and note whether the sound be confounded, amplified, or dulled. Which two instances will also give light to the mixture of sounds, whereof we shall speak hereafter.

162. A bellows blown in at the hole of a drum, and the drum then strucken, maketh the sound a little flatter, but no other apparent alteration. The cause is manifest: partly for that it hindereth the issue of the sound, and partly for that it maketh the air, being blown together, less movable.

Experiments in consort touching the loudness or softness of sounds, and their carriage at longer or shorter distance.

163. The loudness and softness of sounds is a thing distinct from the magnitude and exility of sounds; for a base string, though softly strucken, giveth the greater sound; but a treble string, if hard strucken, will be heard much farther off. And the cause is, for that the base string striketh more air, and the treble less air, but with a sharper percussion.

164. It is therefore the strength of the percussion, that is a principal cause of the loudness or softness of sounds; as in knocking harder or softer, winding of a horn stronger or weaker, ringing of a hand-bell harder or softer, &c. And the strength of this percussion consisteth as much or more in the hardness of the body percussed, as in the force of the body percussing: for if you strike against a cloth, it will give a less sound, if against wood, a greater, if against metal yet a greater; and in metals, if you strike against gold, which is the more pliant, it giveth the flatter sound; if against silver or brass, the more ringing sound. As for air, where it is strongly pent, it matcheth a hard body. And therefore we see in discharging of a piece, what a great noise it maketh. We see also, that the charge with bullet, or with paper wet and hard stopped, or with powder alone, rammed in hard, maketh no great difference in the loudness of the report.

165. The sharpness or quickness of the percussion is great cause of the loudness, as well as the strength; as in a whip or wand, if you strike the air with it; the sharper and quicker you strike it, the louder sound it giveth. And in playing upon the lute or virginals, the quick stroke or touch is a great life to the sound. The cause is, for that the quick striking cutteth the air speedily; whereas the soft striking doth rather beat than cut.

Experiments in consort touching the communication of sounds.

The communication of sounds, as in bellies of lutes, empty vessels, &c., hath been touched "obiter," in the majoration of sounds; but it is fit also to make a title of it apart.

166. The experiment for greatest demonstration of communication of sounds, is the chiming of bells; where, if you strike with a hammer upon the upper part, and then upon the midst, and then upon the lower, you shall find the sound to be more treble and more base, according unto the concave on the inside, though the percussion be only on the outside.

167. When the sound is created between the blast of the mouth and the air of the pipe, it hath nevertheless some communication with the matter of the sides of the pipe, and the spirits in them contained; for in a pipe, or trumpet, of wood, and brass, the sound will be diverse; so if the pipe be covered with cloth or silk: it will give a diverse sound from that it would do of itself; so if the pipe be a little wet on the inside, it will make a differing sound from the same pipe dry.

168. That sound made within water doth communicate better with a hard body through water, than made in air it doth with air. "Vide experimentum 134."

Experiments in consort touching equality and inequality of sounds.

We have spoken before, in the inquisition touching music, of musical sounds, whereunto there may be a concord or discord in two parts; which sounds we call tones; and likewise of immusical sounds; and have given the cause, that the tone proceedeth of equality, and the other of inequality. And we have also expressed there, what are the equal bodies that give tones, and what are the unequal that give none. But now we shall speak of such inequality of sounds as proceedeth not from the nature of the bodies themselves, but as accidental; either from the roughness or obliquity of the passage, or from the doubling of the percutient, or from the trepidation of the motion.

169. A bell, if it have a rift in it, whereby the sound hath not a clear passage, giveth a hoarse and jarring sound: so the voice of man, when by cold taken the weasond groweth rugged, and, as we call it, furred, becometh hoarse. And in these two instances the sounds are ingrate, because they are merely unequal: but if they be unequal in equality, then the sound is grateful but purling.

170. All instruments that have either returns, as trumpets; or flexions, as cornets; or are drawn up, and put from, as sackbuts; have a purling sound; but the recorder, or flute, that have none of these inequalities, give a clear sound. Nevertheless, the recorder itself, or pipe, moistened a little in the inside, soundeth more solemnly, and with a little purling or hissing. Again, a wreathed string, such as are in the base strings of bandoras, giveth also a purling sound.

171. But a lutestring, if it be merely unequal in its parts, giveth a harsh and untunable sound; which strings we call false, being bigger in one place than in other; and therefore wire strings are never false. We see also, that when we try a false lutestring, we use to extend it hard between the fingers, and to fillip it; and if it giveth a

double species, it is true; but if it giveth a treble, or more, it is false.

172. Waters, in the noise they make as they run, represent to the ear a trembling noise; and in regals, where they have a pipe they call the nightingale-pipe, which containeth water, the sound hath a continual trembling: and children have also little things they call cocks, which have water in them; and when they blow or whistle in them, they yield a trembling noise; which trembling of water hath an affinity with the letter *L*. All which inequalities of trepidation are rather pleasant than otherwise.

173. All base notes, or very treble notes, give an asper sound; for that the base striketh more air than it can well strike equally: and the treble cutteth the air so sharp, as it returneth too swift to make the sound equal: and therefore a mean or tenor is the sweetest part.

174. We know nothing that can at pleasure make a musical or immusical sound by voluntary motion, but the voice of man and birds. The cause is, no doubt, in the weasond or windpipe, which we call "aspera arteria," which, being well extended, gathereth equality; as a bladder that is wrinkled, if it be extended, becometh smooth. The extension is always more in tones than in speech: therefore the inward voice or whisper can never give a tone. And in singing, there is, manifestly, a greater working and labour of the throat than in speaking; as appeareth in the thrusting out or drawing in of the chin, when we sing.

175. The humming of bees is an unequal buzzing, and is conceived by some of the ancients not to come forth at their mouth, but to be an inward sound; but, it may be, it is neither; but from the motion of their wings: for it is not heard but when they stir.

176. All metals quenched in water give a sibilation or hissing sound, which hath an affinity with the letter *Z*, notwithstanding the sound be created between the water or vapour, and the air. Seething also, if there be but small store of water in a vessel, giveth a hissing sound; but boiling in a full vessel giveth a bubbling sound, drawing somewhat near to the cocks used by children.

177. Trial would be made, whether the inequality or interchange of the medium will not produce an inequality of sound; as if three bells were made one within another, and air betwixt each; and then the uttermost bell were chimed with a hammer, how the sound would differ from a simple bell. So likewise take a plate of brass and a plank of wood, and join them close together, and knock upon one of them, and see if they do not give an unequal sound. So make two or three partitions of wood in a hogshead, with holes or knots in them; and mark the difference of their sound from the sound of a hogshead without such partitions.

Experiments in consort touching the more treble and the more base tones, or musical sounds.

178. It is evident, that the percussion of the greater quantity of air causeth the baser sound; and the less quantity the more treble sound. The percussion of the greater quantity of air is produced by the greatness of the body percussing; by the latitude of the concave by which the sound passeth; and by the longitude of the same concave. Therefore we see that a base string is greater than a treble; a base pipe hath a greater bore than a treble; and in pipes, and the like, the lower the note-holes be, and the further off from the mouth of the pipe, the more base sound they yield; and the nearer the mouth, the more treble. Nay more, if you strike an entire body, as an andiron of brass, at the top, it maketh a more treble sound; and at the bottom a baser.

179. It is also evident, that the sharper or quicker percussion of air causeth the more treble sound; and the slower or heavier, the more base sound. So we see in strings; the more they are wound up and strained, and thereby give a more quick start-back, the more treble is the sound; and the slacker they are, or less wound up, the baser is the sound. And therefore, a bigger string more strained, and a lesser string less strained, may fall into the same tone.

180. Children, women, eunuchs, have more small and shrill voices than men. The reason is, not for that men have greater heat, which may make the voice stronger, for the strength of a voice or sound doth make a difference in the loudness or softness, but not in the tone, but from the dilatation of the organ; which, it is true, is likewise caused by heat. But the cause of changing the voice at the years of puberty is more obscure. It seemeth to be, for that when much of the moisture of the body, which did before irrigate the parts, is drawn down to the spermatical vessels, it leaveth the body more hot than it was; whence cometh the dilatation of the pipes: for we see plainly all effects of heats do then come on; as pilosity, more roughness of the skin, hardness of the flesh, &c.

181. The industry of the musician hath produced two other means of straining or intension of strings, besides their winding up. The one is the stopping of the string with the finger; as in the necks of lutes, viols, &c. The other is the shortness of the string, as in harps, virginals, &c. Both these have one and the same reason; for they cause the string to give a quicker start.

182. In the straining of a string, the further it is strained, the less superstraining goeth to a note; for it requireth good winding of a string before it will make any note at all: and in the stops of lutes, &c., the higher they go, the less distance is between the frets.

183. If you fill a drinking-glass with water, especially one sharp below and wide above, and

fillip upon the brim or outside; and after empty part of the water, and so more and more, and still try the tone by fillipping; you shall find the tone fall and be more base, as the glass is more empty.

Experiments in consort touching the proportion of treble and base tones.

The just and measured proportion of the air percussed, towards the baseness or trebleness of tones, is one of the greatest secrets in the contemplation of sounds. For it discovereth the true coincidence of tones into diapasons; which is the return of the same sound. And so of the concords and discords between the unison and diapason, which we have touched before in the experiments of music; but think fit to resume it here as a principal part of our inquiry touching the nature of sounds. It may be found out in the proportion of the winding of strings; in the proportion of the distance of frets, and in the proportion of the concave of pipes, &c., but most commodiously in the last of these.

184. Try therefore the winding of a string once about, as soon as it is brought to that extension as will give a tone; and then of twice about, and thrice about, &c., and mark the scale or difference of the rise of the tone: whereby you shall discover, in one, two effects; both the proportion of the sound towards the dimension of the winding; and the proportion likewise of the sound towards the string, as it is more or less strained. But note that to measure this, the way will be, to take the length in a right line of the string, upon any winding about of the peg.

185. As for the stops, you are to take the number of frets; and principally the length of the line, from the first stop of the string, unto such a stop as shall produce a diapason to the former stop upon the same string.

186. But it will best, as it is said, appear in the bores of wind instruments: and therefore cause some half dozen pipes to be made, in length and all things else alike, with a single, double, and so on to a sextuple bore; and so mark what fall of tone every one giveth. But still in these three last instances, you must diligently observe, what length of string, or distance of stop, or concave of air, maketh what rise of sound. As in the last of these, which, as we said, is that which giveth the aptest demonstration, you must set down what increase of concave goeth to the making of a note higher; and what of two notes; and what of three notes; and so up to the diapason: for then the great secret of numbers and proportions will appear. It is not unlike that those that make recorders, &c., know this already: for that they make them in sets: and likewise bell-founders, in fitting the tune of their bells. So that inquiry may save trial. Surely it hath been observed by one of the ancients, that an empty barrel knocked upon with the finger, giveth a diapason to the sound of the like barrel full; but how that should be, I do not well understand; for that the knocking of a barrel, full or empty, doth scarce give any tone.

187. There is required some sensible difference in the proportion of creating a note, towards the sound itself, which is passive: and that it be not too near, but at a distance. For in a recorder, the three uppermost holes yield one tone; which is a note lower than the tone of the first three. And the like, no doubt, is required in the winding or stopping of strings.

Experiments in consort touching exterior and interior sounds.

There is another difference of sounds, which we will call exterior and interior. It is not soft nor loud: nor it is not base nor treble: nor it is not musical nor immusical: though it be true, that there can be no tone in an interior sound; but on the other side, in an exterior sound there may be both musical and immusical. We shall therefore enumerate them, rather than precisely distinguish them; though, to make some adumbration of what we mean, the interior is rather an impulsion or contusion of the air, than an elision or section of the same: so as the percussion of the one towards the other differeth, as a blow differeth from a cut.

188. In speech of man, the whispering, which they call "susurrus" in Latin, whether it be louder or softer, is an interior sound; but the speaking out is an exterior sound; and therefore you can never make a tone nor sing in whispering; but in speech you may: so breathing, or blowing by the mouth, bellows, or wind, though loud, is an interior sound; but the blowing through a pipe or concave, though soft, is an exterior. So likewise the greatest winds, if they have no coarctation, or blow not hollow, give an interior sound; the whistling or hollow wind yieldeth a singing, or exterior sound; the former being pent by some other body; the latter being pent in by its own density: and therefore we see, that when the wind bloweth hollow, it is a sign of rain. The flame, as it moveth within in itself or is blown by a bellows, giveth a murmur or interior sound.

189. There is no hard body, but struck against another hard body, will yield an exterior sound; greater or lesser: insomuch as if the percussion be over-soft, it may induce a nullity of sound; but never an interior sound; as when one treadeth so softly that he is not heard.

190. Where the air is the percutient, pent or not pent, against a hard body, it never giveth an exterior sound; as if you blow strongly with a bellows against a wall.

191. Sounds, both exterior and interior, may be made as well by suction as by emission of the breath; as in whistling or breathing.

Experiments in consort touching articulation of sounds.

192. It is evident, and it is one of the strangest secrets in sounds, that the whole sound is not in the whole air only; but the whole sound is also in every small part of the air. So that all the curious diversity of articulate sounds, of the voice of man or birds, will enter at a small cranny inconfused.

193. The unequal agitation of the winds and the like, though they be material to the carriage of the sounds farther or less way; yet they do not confound the articulation of them at all, within that distance that they can be heard; though it may be, they make them to be heard less way than in a still: as hath been partly touched.

194. Over great distance confoundeth the articulation of sounds; as we see, that you may hear the sound of a preacher's voice, or the like, when you cannot distinguish what he saith. And one articulate sound will confound another, as when many speak at once.

195. In the experiment of speaking under water, when the voice is reduced to such an extreme exility, yet the articulate sounds, which are the words, are not confounded, as hath been said.

196. I conceive, that an extreme small or an extreme great sound cannot be articulate; but that the articulation requireth a mediocrity of sound: for that the extreme small sound confoundeth the articulation by contracting; and the great sound by dispersing: and although, as was formerly said, a sound articulate, already created, will be contracted into a small cranny; yet the first articulation requireth more dimension.

197. It hath been observed, that in a room, or in a chapel, vaulted below and vaulted likewise in the roof, a preacher cannot be heard so well as in the like places, not so vaulted. The cause is, for that the subsequent words come on before the precedent words vanish: and therefore the articulate sounds are more confused, though the gross of the sound be greater.

198. The motions of the tongue, lips, throat, palate, &c., which go to the making of the several alphabetical letters, are worthy inquiry, and pertinent to the present inquisition of sounds: but because they are subtle, and long to describe, we will refer them over, and place them amongst the experiments of speech. The Hebrews have been diligent in it, and have assigned which letters are labial, which dental, which guttural, &c. As for the Latins and Grecians, they have distinguished between semi-vowels and mutes; and in mutes between "mutæ tenues, mediæ," and "aspiratæ;" not amiss, but yet not diligently enough. For the special strokes and motions that create those sounds, they have little inquired: as, that the letters *B*, *P*, *F*, *M*, are not expressed, but with the contracting or shutting of the mouth; that the letters *N* and *B* cannot be pronounced but that the letter *N* will turn into *M*; as "hecatonba" will be "hecatomba." That *M* and *T* cannot be pronounced together, but *P* will come between; as "emtus" is pronounced "emptus;" and a number of the like. So that if you inquire to the full, you will find, that to the making of the whole alphabet there will be fewer simple motions required than there are letters.

199. The lungs are the most spungy part of the body; and therefore ablest to contract and dilate itself: and where it contracteth itself, it expelleth the air; which, through the artery, throat, and mouth, maketh the voice: but yet articulation is not made but with the help of the tongue, palate, and the rest of those they call instruments of voice.

200. There is found a similitude between the sound that is made by inanimate bodies, or by animate bodies that have no voice articulate, and divers letters of articulate voices: and commonly men have given such names to those sounds as do allude unto the articulate letters; as trembling of water hath resemblance with the letter *L*; quenching of hot metals with the letter *Z*; snarling of dogs with the letter *R*; the noise of screech-owls with the letter *Sh*; voice of cats with the diphthong *Eu*; voice of cuckoos with the diphthong *Ou*; sounds of strings with the letter *Ng*; so that if a man, for curiosity or strangeness' sake, would make a puppet or other dead body to pronounce a word, let him consider, on the one part, the motion of the instruments of voice; and on the other part, the like sounds made in inanimate bodies; and what conformity there is that causeth the similitude of sounds; and by that he may minister light to that effect.

CENTURY III.

Experiments in consort touching the motion of sounds, in what lines they are circular, oblique, straight, upwards, downwards, forwards, backwards.

201. ALL sounds whatsoever move round; that is to say, on all sides: upwards, downwards, forwards, and backwards. This appeareth in all instances.

202. Sounds do not require to be conveyed to the sense in a right line, as visibles do, but may be arched; though it be true they move strongest in a right line; which nevertheless is not caused by the rightness of the line, but by the shortness of the distance; "linea recta brevissima." And therefore we see if a wall be between, and you speak on the one side, you hear it on the other; which is not because the sound passeth through the wall, but archeth over the wall.

203. If the sound be stopped and repercussed, it cometh about on the other side in an oblique line. So, if in a coach one side of the boot be down, and the other up, and a beggar beg on the close side; you will think that he were on the open side. So likewise, if a bell or clock be, for example, on the north side of a chamber, and the window of that chamber be upon the south; he that is in the chamber will think the sound came from the south.

204. Sounds, though they spread round, so that there is an orb or spherical area of the sound, yet they move strongest, and go farthest in the fore-lines, from the first local impulsion of the air. And therefore, in preaching, you shall hear the preacher's voice better before the pulpit than behind it, or on the sides, though it stand open. So a harquebuss, or ordnance, will be farther heard forwards from the mouth of the piece, than backwards, or on the sides.

205. It may be doubted, that sounds do move better downwards than upwards. Pulpits are placed high above the people. And when the ancient generals spake to their armies, they had ever a mount of turf cast up, whereupon they stood; but this may be imputed to the stops and obstacles which the voice meeteth with, when one speaketh upon the level. But there seemeth to be more in it; for it may be that spiritual species, both of things visible and sounds, do move better downwards than upwards. It is a strange thing, that to men standing below on the ground, those that be on the top of Paul's seem much less than they are, and cannot be known; but to men above, those below seem nothing so much lessened, and may be known: yet it is true, that all things to them above seem also somewhat contracted, and better collected into figures: as knots in gardens show best from an upper window or terrace

206. But to make an exact trial of it, let a man stand in a chamber not much above the ground, and speak out at the window, through a trunk, to one standing on the ground, as softly as he can, the other laying his ear close to the trunk; then "via versa," let the other speak below, keeping the same proportion of softness; and let him in the chamber lay his ear to the trunk: and this may be the aptest means to make a judgment, whether sounds descend or ascend better.

Experiments in consort touching the lasting and perishing of sounds; and touching the time they require to their generation or delation.

207. After that sound is created, which is in a moment, we find it continueth some small time, melting by little and little. In this there is a wonderful error amongst men, who take this to be a continuance of the first sound; whereas, in truth, it is a renovation, and not a continuance; for the body percussed hath, by reason of the percussion, a trepidation wrought in the minute parts, and so reneweth the percussion of the air. This appeareth manifestly, because that the melting sound of a bell, or of a string strucken, which is thought to be a continuance, ceaseth as soon as the bell or string are touched. As in a virginal, as soon as ever the jack falleth, and toucheth the string, the sound ceaseth; and in a bell, after you have chimed upon it, if you touch the bell the sound ceaseth. And in this you must distinguish that there are two trepidations: the one manifest and local; as of the bell when it is pensile: the other secret, of the minute parts; such as is described in the ninth instance. But it is true, that the local helpeth the secret greatly. We see likewise that in pipes, and other wind instruments, the sound lasteth no longer than the breath bloweth. It is true, that in organs there is a confused murmur for a while after you have played; but that is but while the bellows are in falling.

208. It is certain, that in the noise of great ordnance, where many are shot off together, the sound will be carried, at the least, twenty miles upon the land, and much farther upon the water. But then it will come to the ear, not in the instant of the shooting off, but it will come an hour or more later. This must needs be a continuance of the first sound; for there is no trepidation which should renew it. And the touching of the ordnance would not extinguish the sound the sooner: so that in great sounds the continuance is more than momentary.

209. To try exactly the time wherein sound is delated, let a man stand in a steeple, and have with him a taper; and let some veil be put before the taper; and let another man stand in a field a

mile off. Then let him in the steeple strike the bell; and in the same instant withdraw the veil; and so let him in the field tell by his pulse what distance of time there is between the light seen, and the sound heard: for it is certain that the delation of light is in an instant. This may be tried in far greater distances, allowing greater lights and sounds.

210. It is generally known and observed that light and the object of sight move swifter than sound: for we see the flash of a piece is seen sooner than the noise is heard. And in hewing wood, if one be some distance off, he shall see the arm lifted up for a second stroke, before he hear the noise of the first. And the greater the distance, the greater is the prevention: as we see in thunder which is far off, where the lightning precedeth the crack a good space.

211. Colours, when they represent themselves to the eye, fade not, nor melt not by degrees, but appear still in the same strength; but sounds melt and vanish by little and little. The cause is, for that colours participate nothing with the motion of the air, but sounds do. And it is a plain argument, that sound participateth of some local motion of the air, as a cause "sine qua non," in that it perisheth so suddenly; for in every section or impulsion of the air, the air doth suddenly restore and reunite itself; which the water also doth, but nothing so swiftly.

Experiments in consort touching the passage and interceptions of sounds.

In the trials of the passage, or not passage of sounds, you must take heed you mistake not the passing by the sides of a body for the passing through a body; and therefore you must make the intercepting body very close; for sounds will pass through a small chink.

212. Where sound passeth through a hard or close body, as through water; through a wall; through metal, as in hawks' bells stopped, &c., the hard or close body must be but thin and small; for else it deadeth and extinguisheth the sound utterly. And therefore in the experiment in speaking in air under water, the voice must not be very deep within the water; for then the sound pierceth not. So if you speak on the farther side of a close wall, if the wall be very thick, you shall not be heard; and if there were a hogshead empty, whereof the sides were some two foot thick, and the bunghole stopped; I conceive the resounding sound, by the communication of the outward air with the air within, would be little or none: but only you shall hear the noise of the outward knock as if the vessel were full.

213. It is certain that in the passage of sounds through hard bodies the spirit or pneumatical part of the body itself doth co-operate; but much better when the sides of that hard body are struck, than when the percussion is only within, without touch of the sides. Take therefore a hawk's bell, the holes stopped up, and hang it by a thread within a bottle glass, and stop the mouth of the glass very close with wax; and then shake the glass, and see whether the bell give any sound at all, or how weak: but note, that you must instead of the thread take a wire; or else let the glass have a great belly; lest when you shake the bell, it dash upon the sides of the glass.

214. It is plain, that a very long and downright arch for the sound to pass, will extinguish the sound quite; so that that sound, which would be heard over a wall, will not be heard over a church; nor that sound, which will be heard if you stand some distance from the wall, will be heard if you stand close under the wall.

215. Soft and foraminous bodies, in the first creation of the sound, will dead it: for the striking against cloth or fur will make little sound; as hath been said: but in the passage of the sound, they will admit it better than harder bodies; as we see, that curtains and hangings will not stay the sound much; but glass windows, if they be very close, will check a sound more than the like thickness of cloth. We see also in the rumbling of the belly, how easily the sound passeth through the guts and skin.

216. It is worthy the inquiry, whether great sounds, as of ordnance or bells, become not more weak and exile when they pass through small crannies. For the subtilties of articulate sounds, it may be, may pass through small crannies not confused, but the magnitude of the sound, perhaps, not so well.

Experiments in consort touching the medium of sounds.

217. The mediums of sounds are air, soft and porous bodies, also water. And hard bodies refuse not altogether to be mediums of sounds. But all of them are dull and unapt deferents, except the air.

218. In air, the thinner or drier air carrieth not the sound so well as the more dense; as appeareth in night sounds and evening sounds, and sounds in moist weather and southern winds. The reason is already mentioned in the title of majoration of sounds; being for that thin air is better pierced; but thick air preserveth the sound better from waste: let further trial be made by hollowing in mists and gentle showers; for it may be that will somewhat dead the sound.

219. How far forth flame may be a medium of sounds, especially of such sounds as are created by air, and not betwixt hard bodies, let it be tried in speaking where a bonfire is between; but then you must allow for some disturbance the noise that the flame itself maketh.

220. Whether any other liquors, being made mediums, cause a diversity of sound from water, it may be tried: as by the knapping of the tongs,

or striking of the bottom of a vessel, filled either with milk or with oil; which, though they be more light, yet are they more unequal bodies than air.

Of the natures of the mediums we have now spoken; as for the disposition of the said mediums, it doth consist in the penning, or not penning of the air; of which we have spoken before in the title of delation of sounds: it consisteth also in the figure of the concave through which it passeth; of which we will speak next.

Experiments in consort, what the figures of the pipes, or concaves, or the bodies deferent, conduce to the sounds.

How the figures of pipes, or concaves, through which sounds pass, or of other bodies deferent, conduce to the variety and alteration of the sounds; either in respect of the greater quantity, or less quantity of air which the concaves receive, or in respect of the carrying of sounds longer and shorter way; or in respect of many other circumstances; they have been touched, as falling into other titles. But those figures which we are now to speak of, we intend to be, as they concern the lines through which the sound passeth; as straight, crooked, angular, circular, &c.

221. The figure of a bell partaketh of the pyramis, but yet coming off and dilating more suddenly. The figure of a hunter's horn and cornet is oblique; yet they have likewise straight horns; if they be of the same bore with the oblique, differ little in sound, save that the straight require somewhat a stronger blast. The figures of recorders, and flutes, and pipes are straight; but the recorder hath a less bore and a greater, above and below. The trumpet hath the figure of the letter *S*: which maketh that purling sound, &c. Generally the straight line hath the cleanest and roundest sound, and the crooked the more hoarse and jarring.

222. Of a sinuous pipe that may have some four flexions, trial would be made. Likewise of a pipe made like a cross, open in the midst. And so likewise of an angular pipe; and see what will be the effects of these several sounds. And so again of a circular pipe; as if you take a pipe perfect round, and make a hole whereinto you shall blow, and another hole not far from that; but with a traverse or stop between them: so that your breath may go the round of the circle, and come forth at the second hole. You may try likewise percussions of solid bodies of several figures; as globes, flats, cubes, crosses, triangles, &c., and their combinations, as flat against flat, and convex against convex, and convex against flat, &c., and mark well the diversities of the sounds. Try also the difference in sound of several crassitudes of hard bodies percussed; and take knowledge of the diversities of the sounds. I myself have tried, that a bell of gold yieldeth an excellent sound, not inferior to that of silver or brass, but rather better: yet we see that a piece of money of gold soundeth far more flat than a piece of money of silver.

223. The harp hath the concave not along the strings, but across the strings; and no instrument hath the sound so melting and prolonged as the Irish harp. So as I suppose, that if a virginal were made with a double concave, the one all the length, as the virginal hath, the other at the end of the strings, as the harp hath; it must needs make the sound perfecter, and not so shallow and jarring. You may try it without any sound-board along, but only harp-wise at one end of the strings; or lastly, with a double concave, at each end of the strings one.

Experiments in consort touching the mixture of sounds.

224. There is an apparent diversity between the species visible and audible in this, that the visible doth not mingle in the medium, but the audible doth. For if we look abroad, we see heaven, a number of stars, trees, hills, men, beasts, at once. And the species of the one doth not confound the other. But if so many sounds came from several parts, one of them would utterly confound the other. So we see, that voices or consorts of music do make a harmony by mixture, which colours do not. It is true nevertheless that a great light drowneth a smaller, that it cannot be seen; as the sun that of a glow-worm; as well as a great sound drowneth a lesser. And I suppose likewise, that if there were two lanterns of glass, the one a crimson, and the other an azure, and a candle within either of them, those coloured lights would mingle, and cast upon a white paper a purple colour. And even in colours, they yield a faint and weak mixture: for white walls make rooms more lightsome than black, &c. but the cause of the confusion in sounds, and the inconfusion in species visible, is, for that the sight worketh in right lines, and maketh several cones; and so there can be no coincidence in the eye or visual point: but sounds, that move in oblique and arcuate lines, must needs encounter and disturb the one the other.

225. The sweetest and best harmony is, when every part or instrument is not heard by itself, but a conflation of them all; which requireth to stand some distance off, even as it is in the mixture of perfumes; or the taking of the smells of several flowers in the air.

226. The disposition of the air in other qualities, except it be joined with sound, hath no great operation upon sounds: for whether the air be lightsome or dark, hot or cold, quiet or stirring, except it be with noise, sweet smelling, or stinking, or the like; it importeth not much; some pretty alteration or difference it may make.

227. But sounds do disturb and alter the one the other: sometimes the one drowning the other,

and making it not heard; sometimes the one jarring and discording with the other, and making a confusion; sometimes the one mingling and compounding with the other, and making a harmony.

228. Two voices of like loudness will not be heard twice as far as one of them alone: and two candles of like light will not make things seen twice as far off as one. The cause is profound; but it seemeth that the impressions from the objects of the senses do mingle respectively, every one with his kind: but not in proportion, as is before demonstrated: and the reason may be, because the first impression, which is from privative to active, as from silence to noise, or from darkness to light, is a greater degree than from less noise to more noise, or from less light to more light. And the reason of that again may be, for that the air, after it hath received a charge, doth not receive a surcharge, or greater charge, with like appetite as it doth the first charge. As for the increase of virtue, generally, what proportion it beareth to the increase of the matter, it is a large field, and to be handled by itself.

Experiments in consort touching melioration of sounds.

229. All reflections concurrent do make sounds greater; but if the body that createth either the original sound, or the reflection, be clean and smooth, it maketh them sweeter. Trial may be made of a lute or viol, with the belly of polished brass instead of wood. We see that even in the open air, the wire-string is sweeter than the string of guts. And we see that for reflection water excelleth; as in music near the water, or in echoes.

230. It hath been tried, that a pipe a little moistened on the inside, but yet so as there be no drops left, maketh a more solemn sound than if the pipe were dry: but yet with a sweet degree of sibilation or purling; as we touched it before in the title of "equality." The cause is, for that all things porous being superficially wet, and, as it were, between dry and wet, became a little more even and smooth; but the purling, which must needs proceed of inequality, I take to be bred between the smoothness of the inward surface of the pipe, which is wet, and the rest of the wood of the pipe unto which the wet cometh not, but it remaineth dry.

231. In frosty weather, music within doors soundeth better. Which may be by reason not of the disposition of the air, but of the wood or string of the instrument, which is made more crisp, and so more porous and hollow: and we see that old lutes sound better than new, for the same reason. And so do lute-strings that have been kept long.

232. Sound is likewise meliorated by the mingling of open air with pent air; therefore trial may be made of a lute or viol with a double belly, making another belly with a knot over the strings; yet so as there be room enough for the strings, and room enough to play below that belly. Trial may be made also of an Irish harp, with a concave on both sides, whereas it useth to have it but on one side. The doubt may be, lest it should make too much resounding, whereby one note would overtake another.

233. If you sing into the hole of a drum, it maketh the singing more sweet. And so I conceive it would, if it were a song in parts sung into several drums; and for handsomeness and strangeness' sake, it would not be amiss to have a curtain between the place where the drums are, and the hearers.

234. When a sound is created in a wind instrument between the breath and the air, yet if the sound be communicated with a more equal body of the pipe, it meliorateth the sound. For, no doubt, there would be a differing sound in a trumpet or pipe of wood: and again in a trumpet or pipe of brass. It were good to try recorders and hunters' horns of brass, what the sound would be.

235. Sounds are meliorated by the intension of the sense, where the common sense is collected most to the particular sense of hearing, and the sight suspended: and therefore sounds are sweeter, as well as greater, in the night than in the day; and I suppose they are sweeter to blind men than to others: and it is manifest, that between sleeping and waking, when all the senses are bound and suspended, music is far sweeter than when one is fully waking.

Experiments in consort touching the imitation of sounds.

236. It is a thing strange in nature when it is attentively considered, how children, and some birds, learn to imitate speech. They take no mark at all of the motion of the mouth of him that speaketh, for birds are as well taught in the dark as by light. The sounds of speech are very curious and exquisite: so one would think it were a lesson hard to learn. It is true that it is done with time, and by little and little, and with many essays and proffers: but all this dischargeth not the wonder. It would make a man think, though this which we shall say may seem exceeding strange, that there is some transmission of spirits; and that the spirits of the teacher, put in motion, should work with the spirits of the learner a predisposition to offer to imitate; and so to perfect the imitation by degrees. But touching operations by transmissions of spirits, which is one of the highest secrets in nature, we shall speak in due place, chiefly when we come to inquire of imagination. But as for imitation, it is certain that there is in men and other creatures a predisposition to imitate. We see how ready

apes and monkeys are to imitate all motions of man; and in the catching of dottrels, we see how the foolish bird playeth the ape in gestures: and no man, in effect, doth accompany with others, but he learneth, ere he is aware, some gesture, or voice, or fashion of the other.

237. In imitation of sounds, that man should be the teacher is no part of the matter; for birds will learn one of another; and there is no reward by feeding, or the like, given them for the imitation; and besides, you shall have parrots that will not only imitate voices, but laughing, knocking, squeaking of a door upon the hinges, or of a cart-wheel; and, in effect, any other noise they hear.

238. No beast can imitate the speech of man, but birds only; for the ape itself, that is so ready to imitate otherwise, attaineth not any degree of imitation of speech. It is true, that I have known a dog, that if one howled in his ear, he would fall a howling a great while. What should be the aptness of birds in comparison of beasts, to imitate the speech of man, may be further inquired. We see that beasts have those parts which they count the instruments of speech, as lips, teeth, &c., liker unto man than birds. As for the neck, by which the throat passeth, we see many beasts have it for the length as much as birds. What better gorge or artery birds have may be farther inquired. The birds that are known to be speakers are, parrots, pies, jays, daws, and ravens. Of which parrots have an adunque bill, but the rest not.

239. But I conceive, that the aptness of birds is not so much in the conformity of the organs of speech as in their attention. For speech must come by hearing and learning; and birds give more heed, and mark sounds more than beasts; because naturally they are more delighted with them, and practise them more, as appeareth in their singing. We see also that those that teach birds to sing, do keep them waking to increase their attention. We see also that cock birds, amongst singing birds, are ever the better singers; which may be, because they are more lively and listen more.

240. Labour and intention to imitate voices doth conduce much to imitation: and therefore we see that there be certain "pantomimi," that will represent the voices of players of interludes so to life, as if you see them not you would think they were those players themselves; and so the voices of other men that they hear.

241. There have been some that could counterfeit the distance of voices, which is a secondary object of hearing, in such sort, as when they stand fast by you, you would think the speech came from afar off, in a fearful manner. How this is done may be further inquired. But I see no great use of it but for imposture, in counterfeiting ghosts or spirits.

Experiments in consort touching the reflection of sounds.

There be three kinds of reflections of sounds; a reflection concurrent, a reflection iterant, which we call echo; and a super-reflection, or an echo of an echo; whereof the first hath been handled in the title of "magnitude of sounds;" the latter two we will now speak of.

242. The reflection of species visible by mirrors you may command; because passing in right lines, they may be guided to any point: but the reflection of sounds is hard to master; because the sound, filling great spaces in arched lines, cannot be so guided: and therefore we see there hath not been practised any means to make artificial echoes. And no echo already known returneth in a very narrow room.

243. The natural echoes are made upon walls, woods, rocks, hills, and banks; as for waters, being near, they make a concurrent echo; but being farther off, as upon a large river, they make an iterant echo: for there is no difference between the concurrent echo and the iterant, but the quickness or slowness of the return. But there is no doubt but water doth help the delation of echo; as well as it helpeth the delation of original sounds.

244. It is certain, as hath been formerly touched, that if you speak through a trunk stopped at the farther end, you shall find a blast return upon your mouth, but no sound at all The cause is, for that the closeness which preserveth the original, is not able to preserve the reflected sound: besides that echoes are seldom created but by loud sounds. And therefore there is less hope of artificial echoes in air pent in a narrow concave. Nevertheless it hath been tried, that one leaning over a well of twenty-five fathom deep, and speaking, though but softly, yet not so soft as a whisper, the water returned a good audible echo. It would be tried, whether speaking in caves, where there is no issue save where you speak, will not yield echoes as wells do.

245. The echo cometh, as the original sound doth, in a round orb of air: it were good to try the creating of the echo where the body repercussing maketh an angle: as against the return of a wall, &c. Also we see that in mirrors there is the like angle of incidence, from the object to the glass, and from the glass to the eye. And if you strike a ball sidelong, not full upon the surface, the rebound will be as much the contrary way: whether there be any such resilience in echoes, that is, whether a man shall hear better if he stand aside the body repercussing, than if he stand where he speaketh, or anywhere in a right line between, may be tried. Trial likewise would be made, by standing nearer the place of repercussing than he that speaketh; and again by standing farther off than he that speaketh; and so knowledge would be taken, whether echoes,

as well as original sounds, be not strongest near hand.

246. There be many places where you shall hear a number of echoes one after another; and it is when there is a variety of hills or woods, some nearer, some farther off: so that the return from the farther, being last created, will be likewise last heard.

247. As the voice goeth round, as well towards the back, as towards the front of him that speaketh; so likewise doth the echo: for you have many back echoes to the place where you stand.

248. To make an echo that will report three, or four, or five words distinctly, it is requisite that the body repercussing be a good distance off: for if it be near, and yet not so near as to make a concurrent echo, it choppeth with you upon the sudden. It is requisite likewise that the air be not much pent: for air at a great distance pent, worketh the same effect with air at large in a small distance. And therefore in the trial of speaking in the well, though the well was deep, the voice came back suddenly, and would bear the report but of two words.

249. For echoes upon echoes, there is a rare instance thereof in a place which I will now exactly describe. It is some three or four miles from Paris, near a town called Pont-Charenton; and some bird-bolt shot or more from the river of Seine. The room is a chapel or small church. The walls all standing, both at the sides and at the ends. Two rows of pillars, after the manner of aisles of churches, also standing; the roof all open, not so much as any embowments near any of the walls left. There was against every pillar a stack of billets above a man's height; which the watermen that bring wood down the Seine in stacks, and not in boats, laid there, as it seemeth, for their ease. Speaking, at the one end, I did hear it return the voice thirteen several times; and I have heard of others, that it would return sixteen times: for I was there about three of the clock in the afternoon: and it is best, as all other echoes are, in the evening. It is manifest that it is not echoes from several places, but a tossing of the voice, as a ball, to and fro, like to reflections in looking-glasses, where if you place one glass before and another behind, you shall see the glass behind with the image, within the glass before; and again, the glass before in that; and divers such super-reflections, till the "species speciei" at last die. For it is every return weaker and more shady. In like manner, the voice in that chapel createth "speciem speciei," and maketh succeeding super-reflections; for it melteth by degrees, and every reflection is weaker than the former: so that if you speak three words, it will, perhaps, some three times report you the whole three words; and then the two latter words for some times; and then the last word alone for some times, still fading and growing weaker. And whereas in echoes of one return, it is much to hear four or five words; in this echo of so many returns upon the matter, you hear above twenty words for three.

250. The like echo upon echo, but only with two reports, hath been observed to be, if you stand between a house and a hill, and lure towards the hill. For the house will give a back echo; one taking it from the other, and the latter the weaker.

251. There are certain letters that an echo will hardly express; as *S* for one, especially being principal in a word. I remember well, that when I went to the echo at Pont-Charenton, there was an old Parisian, that took it to be the work of spirits, and of good spirits. For, said he, call "Satan," and the echo will not deliver back the devil's name; but will say, "va t'en;" which is as much in French as "apage" or avoid. And thereby I did hap to find, that an echo would not return *S*, being but a hissing and an interior sound.

252. Echoes are some more sudden, and chop again as soon as the voice is delivered; as hath been partly said: others are more deliberate, that is, give more space between the voice and the echo, which is caused by the local nearness or distance: some will report a longer train of words, and some a shorter; some more loud, full as loud as the original, and sometimes more loud, and some weaker and fainter.

253. Where echoes come from several parts at the same distance, they must needs make, as it were, a choir of echoes, and so make the report greater, and even a continued echo; which you shall find in some hills that stand encompassed theatre-like.

254. It doth not yet appear that there is refraction in sounds, as well as in species visible. For I do not think that, if a sound should pass through divers mediums, as air, cloth, wood, it would deliver the sound in a differing place from that unto which it is deferred; which is the proper effect of refraction. But majoration, which is also the work of refraction, appeareth plainly in sounds, as hath been handled at full, but it is not by diversity of mediums.

Experiments in consort touching the consent and dissent between visibles and audibles.

We have "obiter," for demonstration's sake, used in divers instances the examples of the sight and things visible, to illustrate the nature of sounds: but we think good now to prosecute that comparison more fully.

Consent of visibles and audibles.

255. Both of them spread themselves in round, and fill a whole floor or orb unto certain limits; and are carried a great way: and do languish and lessen by degrees, according to the distance of the objects from the sensories.

256. Both of them have the whole species in every small portion of the air, or medium, so as the species do pass through small crannies without confusion: as we see ordinarily in levels, as to the eye; and in crannies or chinks, as to the sound.

257. Both of them are of a sudden and easy generation and delation: and likewise perish swiftly and suddenly; as if you remove the light, or touch the bodies that give the sound.

258. Both of them do receive and carry exquisite and accurate differences; as of colours, figures, motions, distances, in visibles; and of articulate voices, tones, songs, and quaverings, in audibles.

259. Both of them, in their virtue and working, do not appear to admit any corporal substance into their mediums, or the orb of their virtue; neither again to rise or stir any evident local motion in their mediums as they pass; but only to carry certain spiritual species; the perfect knowledge of the cause whereof, being hitherto scarcely attained, we shall search and handle in due place.

260. Both of them seem not to generate or produce any other effect in nature, but such as appertaineth to their proper objects and senses, and are otherwise barren.

261. But both of them, in their own proper action, do work three manifest effects. The first, in that the stronger species drowneth the lesser; as the light of the sun, the light of a glow-worm; the report of an ordnance, the voice: The second, in that an object of surcharge or excess destroyeth the sense; as the light of the sun the eye; a violent sound near the ear the hearing: The third, in that both of them will be reverberate; as in mirrors, and in echoes.

262. Neither of them doth destroy or hinder the species of the other, although they encounter in the same medium, as light or colour hinder not sound, nor "e contra."

263. Both of them effect the sense in living creatures, and yield objects of pleasure and dislike: yet nevertheless the objects of them do also, if it be well observed, affect and work upon dead things; namely, such as have some conformity with the organs of the two senses, as visibles work upon a looking-glass, which is like the pupil of the eye: and audibles upon the places of echo, which resemble in some sort the cavern and structure of the ear.

264. Both of them do diversely work, as they have their medium diversely disposed. So a trembling medium, as smoke, maketh the object seem to tremble, and a rising or falling medium, as winds, maketh the sounds to rise or fall.

265. To both, the medium, which is the most propitious and conducible, is air, for glass or water, &c. are not comparable.

266. In both of them, where the object is fine and accurate, it conduceth much to have the sense intentive and erect, insomuch as you contract your eye when you would see sharply; and erect your ear when you would hear attentively; which in beasts that have ears movable is most manifest.

267. The beams of light, when they are multiplied and conglomerate, generate heat, which is a different action from the action of sight: and the multiplication and coglomeration of sounds doth generate an extreme rarefaction of the air; which is an action materiate, differing from the action of sound; if it be true, which is anciently reported, that birds with great shouts have fallen down.

Dissents of visibles and audibles.

268. The species of visibles seem to be emissions of beams from the objects seen, almost like odours, save that they are more incorporeal: but the species of audibles seem to participate more with local motion, like percussions, or impressions made upon the air. So that whereas all bodies do seem to work in two manners, either by the communication of their natures or by the impressions and signatures of their motions; the diffusion of species visible seemeth to participate more of the former operation, and the species audible of the latter.

269. The species of audibles seem to be carried more manifestly through the air than the species of visibles: for I conceive that a contrary strong wind will not much hinder the sight of visibles, as it will do the hearing of sounds.

270. There is one difference above all other between visibles and audibles, that is the most remarkable, as that whereupon many smaller differences do depend: namely, that visibles, except lights, are carried in right lines, and audibles in arcuate lines. Hence it cometh to pass, that visibles do not intermingle and confound one another, as hath been said before, but sounds do. Hence it cometh, that the solidity of bodies doth not much hinder the sight, so that the bodies be clear, and the pores in a right line, as in glass, crystal, diamonds, water, &c. but a thin scarf or handkerchief, though they be bodies nothing so solid, hinder the sight: whereas, contrariwise, these porous bodies do not much hinder the hearing, but solid bodies do almost stop it, or at the least attenuate it. Hence also it cometh, that to the reflection of visibles small glasses suffice; but to the reverberation of audibles are required greater spaces, as hath likewise been said before.

271. Visibles are seen further off than sounds are heard, allowing nevertheless the rate of their bigness, for otherwise a great sound will be heard further off than a small body seen.

272. Visibles require, generally, some distance between the object and the eye, to be better seen; whereas in audibles, the nearer the approach of the sound is to the sense, the better. But in this there may be a double error. The one, because to

seeing there is required light; and any thing that toucheth the pupil of the eye all over excludeth the light. For I have heard of a person very credible, who himself was cured of a cataract in one of his eyes, that while the silver needle did work upon the sight of his eye, to remove the film of the cataract, he never saw any thing more clear or perfect than that white needle: which, no doubt, was, because the needle was lesser than the pupil of the eye, and so took not the light from it. The other error may be, for that the object of sight doth strike upon the pupil of the eye directly without any interception; whereas the cave of the ear doth hold off the sound a little from the organ: and so nevertheless there is some distance required in both.

273. Visibles are swiftlier carried to the sense than audibles; as appeareth in thunder and lightning, flame, and report of a piece, motion of the air in hewing of wood. All which have been set down heretofore, but are proper for this title.

274. I conceive also, that the species of audibles do hang longer in the air than those of visibles: for although even those of visibles do hang some time, as we see in rings turned, that show like spheres; in lute-strings filliped; a firebrand carried along, which leaveth a train of light behind it; and in the twilight, and the like; yet I conceive that sounds stay longer, because they are carried up and down with the wind; and because of the distance of the time in ordnance discharged, and heard twenty miles off.

275. In visibles there are not found objects so odious and ingrate to the sense as in audibles. For foul sights do rather displease, in that they excite the memory of foul things, than in the immediate objects. And therefore in pictures, those foul sights do not much offend; but in audibles, the grating of a saw, when it is sharpened, doth offend so much as it setteth the teeth on edge. And any of the harsh discords in music the ear doth straightways refuse.

276. In visibles, after great light, if you come suddenly into the dark, or contrariwise, out of the dark into a glaring light, the eye is dazzled for a time, and the sight confused; but whether any such effect be after great sounds, or after a deep silence, may be better inquired. It is an old tradition, that those that dwell near the cataracts of Nilus are strucken deaf: but we find no such effect in cannoniers nor millers, nor those that dwell upon bridges.

277. It seemeth that the impression of colour is so weak as it worketh not but by a cone of direct beams, or right lines, whereof the basis is in the object, and the vertical point in the eye; so as there is a corradiation and conjunction of beams; and those beams so sent forth, yet are not of any force to beget the like borrowed or second beams, except it be by reflection, whereof we speak not. For the beams pass, and give little tincture to that air which is adjacent; which if they did, we should see colours, out of a right line. But as this is in colours, so otherwise it is in the body of light. For when there is a screen between the candle and the eye, yet the light passeth to the paper whereupon one writeth; so that the light is seen where the body of the flame is not seen, and where any colour, if it were placed where the body of the flame is, would not be seen. I judge that sound is of this latter nature; for when two are placed on both sides of a wall, and the voice is heard, I judge it is not only the original sound which passeth in an arched line; but the sound which passeth above the wall in a right line, begetteth the like motion round about it as the first did, though more weak.

Experiments in consort touching the sympathy or antipathy of sounds one with another.

278. All concords and discords of music are, no doubt, sympathies and antipathies of sounds. And so, likewise, in that music which we call broken music, or consort music, some consorts of instruments are sweeter than others, a thing not sufficiently yet observed: as the Irish harp and base viol agree well: the recorder and stringed music agree well: organs and the voice agree well, &c. But the virginals and the lute, or the Welsh harp and Irish harp, or the voice and pipes alone, agree not so well: but for the melioration of music there is yet much left, in this point of exquisite consorts, to try and inquire.

279. There is a common observation, that if a lute or viol be laid upon the back, with a small straw upon one of the strings, and another lute or viol be laid by it; and in the other lute or viol the unison to that string be strucken, it will make the string move, which will appear both to the eye, and by the straw's falling off. The like will be, if the diapason or eighth to that string be strucken, either in the same lute or viol, or in others lying by: but in none of these there is any report of sound that can be discerned, but only motion.

280. It was devised, that a viol should have a lay of wire-strings below, as close to the belly as a lute, and then the strings of guts mounted upon a bridge as in ordinary viols: to the end, that by this means, the upper strings strucken should make the lower resound by sympathy, and so make the music the better; which if it be to purpose, then sympathy worketh as well by report of sound as by motion. But this device I conceive to be of no use, because the upper strings, which are stopped in great variety, cannot maintain a diapason or unison with the lower, which are never stopped. But if it should be of use at all, it must be in instruments which have no stops, as virginals and harps; wherein trial may be made of two rows of strings, distant the one from the other

281. The experiment of sympathy may be transferred, perhaps, from instruments of strings to other instruments of sound. As to try, if there were in one steeple two bells of unison, whether the striking of the one would move the other, more than if it were another accord: and so in pipes, if they be of equal bore and sound, whether a little straw or feather would move in the one pipe, when the other is blown at a unison.

282. It seemeth, both in ear and eye, the instrument of sense hath a sympathy or similitude with that which giveth the reflection, as hath been touched before; for as the sight of the eye is like a crystal, or glass, or water; so is the ear a sinuous cave, with a hard bone to stop and reverberate the sound; which is like to the places that report echoes.

Experiments in consort touching the hindering or helping of the hearing.

283. When a man yawneth, he cannot hear so well. The cause is, for that the membrane of the ear is extended; and so rather casteth off the sound than draweth it to.

284. We hear better when we hold our breath than contrary: insomuch, as in all listening to attain a sound afar off, men hold their breath. The cause is, for that in all expiration the motion is outwards; and therefore rather driveth away the voice than draweth it: and besides, we see, that in all labour to do things with any strength, we hold the breath; and listening after any sound that is heard with difficulty is a kind of labour.

285. Let it be tried, for the help of the hearing, and I conceive it likely to succeed, to make an instrument like a tunnel; the narrow part whereof may be of the bigness of the hole of the ear; and the broader end much larger, like a bell at the skirts; and the length half a foot or more. And let the narrow end of it be set close to the ear: and mark whether any sound, abroad in the open air, will not be heard distinctly from farther distance than without that instrument; being, as it were, an ear-spectacle. And I have heard there is in Spain an instrument in use to be set to the ear, that helpeth somewhat those that are thick of hearing.

286. If the mouth be shut close, nevertheless there is yielded by the roof of the mouth a murmur, such as is used by dumb men. But if the nostrils be likewise stopped, no such murmur can be made, except it be in the bottom of the palate towards the throat. Whereby it appeareth manifestly, that a sound in the mouth, except such as aforesaid, if the mouth be stopped, passeth from the palate through the nostrils.

Experiments in consort touching the spiritual and fine nature of sounds.

287. The repercussion of sounds, which we call echo, is a great argument of the spiritual essence of sounds. For if it were corporeal, the repercussion should be created in the same manner, and by like instruments with the original sound: but we see what a number of exquisite instruments must concur in speaking of words, whereof there is no such matter in the returning of them, but only a plain stop and repercussion.

288. The exquisite differences of articulate sounds, carried along in the air, show that they cannot be signatures or impressions in the air, as hath been well refuted by the ancients. For it is true, that seals make excellent impressions; and so it may be thought of sounds in their first generation; but then the delation and continuance of them, without any new sealing, show apparently they cannot be impressions.

289. All sounds are suddenly made, and do suddenly perish: but neither that, nor the exquisite differences of them, is matter of so great admiration: for the quaverings and warblings in lutes and pipes are as swift; and the tongue, which is no very fine instrument, doth in speech make no fewer motions than there be letters in all the words which are uttered. But that sounds should not only be so speedily generated, but carried so far every way in such a momentary time, deserveth more admiration. As, for example, if a man stand in the middle of a field and speak aloud, he shall be heard a furlong in round; and that shall be in articulate sounds; and those shall be entire in every little portion of the air; and this shall be done in the space of less than a minute.

290. The sudden generation and perishing of sounds must be one of these two ways. Either that the air suffereth some force by sound, and then restoreth itself as water doth; which being divided, maketh many circles, till it restore itself to the natural consistence: or otherwise, that the air doth willingly imbibe the sound as grateful, but cannot maintain it; for that the air hath, as it should seem, a secret and hidden appetite of receiving the sound at the first; but then other gross and more materiate qualities of the air straightways suffocate it, like unto flame, which is generated with alacrity, but straight quenched by the enmity of the air or other ambient bodies.

There be these differences in general, by which sounds are divided: 1. Musical, immusical. 2. Treble, base. 3. Flat, sharp. 4. Soft, loud. 5. Exterior, interior. 6. Clean, harsh, or purling 7. Articulate, inarticulate.

We have laboured, as may appear, in this inquisition of sounds diligently; both because sound is one of the most hidden portions of nature, as we said in the beginning, and because it is a virtue which may be called incorporeal and immateriate, whereof there be in nature but few. Besides, we were willing, now in these our first centuries, to make a pattern or precedent of an exact inquisition; and we shall do the like

hereafter in some other subjects which require it. For we desire that men should learn and perceive how severe a thing the true inquisition of nature is; and should accustom themselves by the light of particulars, to enlarge their minds to the amplitude of the world, and not reduce the world to the narrowness of their minds.

Experiment solitary touching the orient colours in dissolution of metals.

291. Metals give orient and fine colours in dissolutions; as gold giveth an excellent yellow, quicksilver an excellent green, tin giveth an excellent azure: likewise in their putrefactions or rusts; as vermilion, verdigrease, bise, citrus, &c., and likewise in their vitrifications. The cause is, for that by their strength of body they are able to endure the fire or strong waters, and to be put into an equal posture, and again to retain part of their principal spirit; which two things, equal posture and quick spirits, are required chiefly to make colours lightsome.

Experiment solitary touching prolongation of life.

292. It conduceth unto long life, and to the more placid motion of the spirits, which thereby do less prey and consume the juice of the body, either that men's actions be free and voluntary, that nothing be done "invita Minerva," but "secundum genium;" or, on the other side, that the actions of men be full of regulation and commands within themselves: for then the victory and performing of the command giveth a good disposition to the spirits, especially if there be a proceeding from degree to degree; for then the sense of the victory is the greater. An example of the former of these is in a country life; and of the latter in monks and philosophers, and such as do continually enjoin themselves.

Experiment solitary touching appetite of union in bodies.

293. It is certain that in all bodies there is an appetite of union and evitation of solution of continuity; and of this appetite there be many degrees; but the most remarkable and fit to be distinguished are three. The first in liquors; the second in hard bodies; and the third in bodies cleaving or tenacious. In liquors this appetite is weak: we see in liquors the threading of them in stillicides, as hath been said; the falling of them in round drops, which is the form of union, and the staying of them for a little time in bubbles and froth. In the second degree or kind, this appetite is strong; as in iron, in stone, in wood, &c. In the third, this appetite is in a medium between the other two: for such bodies do partly follow the touch of another body, and partly stick and continue to themselves; and therefore they rope and draw themselves in threads, as we see in pitch, glue, birdlime, &c. But note, that all solid bodies are cleaving more or less: and that they love better the touch of somewhat that is tangible, than of air. For water in small quantity cleaveth to any thing that is solid; and so would metal too, if the weight drew it not off. And therefore gold foliate, or any metal foliate cleaveth; but those bodies which are noted to be clammy and cleaving, are such as have a more indifferent appetite at once to follow another body, and to hold to themselves. And therefore they are commonly bodies ill mixed; and which take more pleasure in a foreign body than in preserving their own consistence, and which have little predominance in drought or moisture.

Experiment solitary touching the like operations of heat and time.

294. Time and heat are fellows in many effects. Heat drieth bodies that do easily expire; as parchment, leaves, roots, clay, &c. And so doth time or age arefy: as in the same bodies, &c. Heat dissolveth and melteth bodies that keep in their spirits: as in divers liquefactions: and so doth time in some bodies of a softer consistence, as is manifest in honey, which by age waxeth more liquid, and the like in sugar; and so in old oil, which is ever more clear and more hot in medicinable use. Heat causeth the spirits to search some issue out of the body; as in the volatility of metals: and so doth time; as in the rust of metals. But generally heat doth that in small time which age doth in long.

Experiment solitary touching the differing operation of fire and time.

295. Some things which pass the fire are softest at first, and by time grow hard, as the crumb of bread. Some are harder when they come from the fire, and afterwards give again, and grow soft, as the crust of bread, bisket, sweet-meats, salt, &c. The cause is, for that in those things which wax hard with time, the work of the fire is a kind of melting; and in those that wax soft with time, contrariwise, the work of the fire is a kind of baking: and whatsoever the fire baketh, time doth in some degree dissolve.

Experiment solitary touching motions by imitation.

296. Motions pass from one man to another, not so much by exciting imagination as by invitation; especially if there be an aptness or inclination before. Therefore gaping, or yawning, and stretching do pass from man to man; for that that causeth gaping and stretching is, when the spirits are a little heavy by any vapour, or the like. For then they strive, as it were, to wring out and expel that which loadeth them. So men drowsy, and desirous to sleep, or before the fit of an ague, do use to yawn and stretch, and do likewise yield a voice or sound, which is an interjection of expulsion: so that if another be apt and prepared to

do the like, he followeth by the sight of another. So the laughing of another maketh to laugh.

Experiment solitary touching infectious diseases.

297. There be some known diseases that are infectious; and others that are not. Those that are infectious are, first, such as are chiefly in the spirits, and not so much in the humours, and therefore pass easily from body to body; such are pestilences, lippitudes, and such like. Secondly, such as taint the breath, which we see passeth manifestly from man to man, and not invisibly, as the effects of the spirits do; such are consumptions of the lungs, &c. Thirdly, such as come forth to the skin, and therefore taint the air of the body adjacent, especially if they consist in an unctuous substance not apt to dissipate, such as scabs and leprosy. Fourthly, such as are merely in the humours, and not in the spirits, breath, or exhalations; and therefore they never infect but by touch only; and such a touch also as cometh within the "epidermis;" as the venom of the French pox, and the biting of a mad dog.

Experiment solitary touching the incorporation of powders and liquors.

298. Most powders grow more close and coherent by mixture of water, than by mixture of oil, though oil be the thicker body: as meal, &c. The reason is, the congruity of bodies; which if it be more, maketh a perfecter imbibition and incorporation; which in most powders is more between them and water, than between them and oil: but painters' colours ground, and ashes, do better incorporate with oil.

Experiment solitary touching exercise of the body.

299. Much motion and exercise is good for some bodies; and sitting and less motion for others. If the body be hot and void of superfluous moistures, too much motion hurteth: and it is an error in physicians to call too much upon exercise. Likewise men ought to beware, that they use not exercise and a spare diet both: but if much exercise, then a plentiful diet; and if sparing diet, then little exercise. The benefits that come of exercise are, first, that it sendeth nourishment into the parts more forcibly. Secondly, that it helpeth to excern by sweat, and so maketh the parts assimilate the more perfectly. Thirdly, that it maketh the substance of the body more solid and compact, and so less apt to be consumed and depredated by the spirits. The evils that come of exercise are, first, that it maketh the spirits more hot and predatory, Secondly, that it doth absorb likewise, and attenuate too much the moisture of the body. Thirdly, that it maketh too great concussion, especially if it be violent, of the inward parts, which delight more in rest. But generally exercise, if it be much, is no friend to prolongation of life, which is one cause why women live longer than men, because they stir less.

Experiment solitary touching meats that induce satiety.

300. Some food we may use long, and much, without glutting, as bread, flesh that is not fat or rank, &c. Some other, though pleasant, glutteth sooner, as sweet-meats, fat-meats, &c. The cause is, for that appetite consisteth in the emptiness of the mouth of the stomach, or possessing it with somewhat that is astringent, and therefore cold and dry. But things that are sweet and fat are more filling, and do swim and hang more about the mouth of the stomach, and go not down so speedily: and again turn soon to choler, which is hot, and ever abateth the appetite. We see also that another cause of satiety is an over-custom, and of appetite is novelty, and therefore meats, if the same be continually taken, induce loathing. To give the reason of the distaste of satiety, and of the pleasure in novelty, and to distinguish not only in meats and drinks, but also in motions, loves, company, delights, studies, what they be that custom maketh more grateful, and what more tedious, were a large field. But for meats, the cause is attraction, which is quicker, and more excited towards that which is new than towards that whereof there remaineth a relish by former use. And, generally, it is a rule, that whatsoever is somewhat ingrate at first is made grateful by custom; but whatsoever is too pleasing at first, groweth quickly to satiate.

CENTURY IV.

Experiments in consort touching the clarification of liquors, and the accelerating thereof.

ACCELERATION of time, in works of nature, may well be esteemed "inter magnalia naturæ." And even in divine miracles, accelerating of the time is next to the creating of the matter. We will now therefore proceed to the inquiry of it: and for acceleration of germination, we will refer it over unto the place where we shall handle the subject of plants generally, and will now begin with other accelerations.

301. Liquors are, many of them, at the first, thick and troubled; as muste, wort, juices of fruits, or herbs expressed, &c. and by time they settle and clarify. But to make them clear before the time is a great work, for it is a spur to nature, and putteth her out of her pace: and, besides, it is of good use for making drinks and sauces potable and serviceable speedily. But to know the means of accelerating clarification, we must first know the causes of clarification. The first cause is, by the separation of the grosser parts of the liquor from the finer. The second, by the equal distribution of the spirits of the liquor with the tangible parts: for that ever representeth bodies clear and untroubled. The third, by the refining the spirit itself, which thereby giveth to the liquor more splendour and more lustre.

302. First, for separation, it is wrought by weight, as in the ordinary residence or settlement of liquors; by heat, by motion, by precipitation, or sublimation, that is, a calling of the several parts either up or down, which is a kind of attraction; by adhesion, as when a body more viscous is mingled and agitated with the liquor, which viscous body, afterwards severed, draweth with it the grosser parts of the liquor; and lastly, by percolation or passage.

303. Secondly, for the even distribution of the spirits, it is wrought by gentle heat; and by agitation or motion, for of time we speak not, because it is that we would anticipate and represent; and it is wrought also by mixture of some other body which hath a virtue to open the liquor, and to make the spirits the better pass through.

304. Thirdly, for the refining of the spirit, it is wrought likewise by heat, by motion, and by mixture of some body which hath virtue to attenuate. So therefore, having shown the causes for the accelerating of clarification in general, and the inducing of it, take these instances and trials.

305. It is in common practice to draw wine or beer from the lees, which we call racking, whereby it will clarify much the sooner; for the lees, though they keep the drink in heart, and make it lasting, yet withal they cast up some spissitude: and this instance is to be referred to separation.

306. On the other side it were good to try, what the adding to the liquor more lees than his own will work; for though the lees do make the liquor turbid, yet they refine the spirits. Take therefore a vessel of new beer, and take another vessel of new beer, and rack the one vessel from the lees, and pour the lees of the racked vessel into the unracked vessel, and see the effect: this instance is referred to the refining of the spirits.

307. Take new beer, and put in some quantity of stale beer into it, and see whether it will not accelerate the clarification, by opening the body of the beer, and cutting the grosser parts, whereby they may fall down into lees. And this instance again is referred to separation.

308. The longer malt or herbs, or the like, are infused in liquor, the more thick and troubled the liquor is; but the longer they be decocted in the liquor, the clearer it is. The reason is plain, because in infusion, the longer it is, the greater is the part of the gross body that goeth into the liquor: but in decoction, though more goe forth, yet it either purgeth at the top, or settleth at the bottom. And therefore the most exact way to clarify is, first, to infuse, and then to take off the liquor and decoct it; as they do in beer, which hath malt first infused in the liquor, and is afterwards boiled with the hop. This also is referred to separation.

309. Take hot embers, and put them about a bottle filled with new beer, almost to the very neck; let the bottle be well stopped, lest it fly out; and continue it, renewing the embers every day, by the space of ten days, and then compare it with another bottle of the same beer set by. Take also lime both quenched and unquenched, and set the bottles in them "ut supra." This instance is referred both to the even distribution, and also to the refining of the spirits by heat.

310. Take bottles, and swing them, or carry them in a wheel-barrow upon rough ground twice in a day, but then you may not fill the bottles full, but leave some air; for if the liquor come close to the stopple, it cannot play nor flower: and when you have shaken them well either way, pour the drink into another bottle stopped close after the usual manner, for if it stay with much air in it, the drink will pall; neither will it settle so perfectly in all the parts. Let it stand some twenty-four hours, then take it, and put it again into a bottle with air, "ut supra:" and thence into a bottle stopped, "ut supra:" and so repeat the same operation for seven days. Note, that in the emptying of one bottle into another, you must do it swiftly lest the drink pall. It were good also to try it in a bottle with a little air below the neck, without emptying. This instance is referred to the even distribution and refining of the spirits by motion.

311. As for percolation inward and outward, which belongeth to separation, trial would be made of clarifying by adhesion, with milk put into new beer, and stirred with it: for it may be that the grosser part of the beer will cleave to the milk: the doubt is, whether the milk will sever well again; which is soon tried. And it is usual in clarifying hippocras to put in milk; which after severeth and carrieth with it the grosser parts of the hippocras, as hath been said elsewhere. Also for the better clarification by percolation, when they tun new beer, they use to let it pass through a strainer, and it is like the finer the strainer is the clearer it will be.

Experiments in consort touching maturation, and the accelerating thereof. And first, touching the maturation and quickening of drinks. And next, touching the maturation of fruits.

The accelerating of maturation we will now inquire of. And of maturation itself. It is of three natures. The maturation of fruits, the maturation of drinks, and the maturation of imposthumes and ulcers. This last we refer to another place, where we shall handle experiments medicinal. There be also other maturations, as of metals, &c. whereof we will speak as occasion serveth. But we will begin with that of drinks, because it hath such affinity with the clarification of liquors.

312. For the maturation of drinks, it is wrought by the congregation of the spirits together, whereby they digest more perfectly the grosser parts: and it is effected partly by the same means that clarification is, whereof we spake before; but then note, that an extreme clarification doth spread the spirits so smooth, as they become dull, and the drink dead, which ought to have a little flowering. And therefore all your clear amber drink is flat.

313. We see the degrees of maturation of drinks in muste, in wine, as it is drunk, and in vinegar. Whereof muste hath not the spirits well congregated; wine hath them well united, so as they make the parts somewhat more oily; vinegar hath them congregated, but more jejune, and in a smaller quantity, the greatest and finest spirit and part being exhaled: for we see vinegar is made by setting the vessel of wine against the hot sun; and therefore vinegar will not burn; for that much of the finer parts is exhaled.

314. The refreshing and quickening of drink palled or dead, is by enforcing the motion of the spirit: so we see that open weather relaxeth the spirit, and maketh it more lively in motion. We see also bottling of beer or ale, while it is new and full of spirit, so that it spirteth when the stopple is taken forth, maketh the drink more quick and windy. A pan of coals in the cellar doth likewise good, and maketh the drink work again. New drink put to drink that is dead provoketh it to work again: nay, which is more, as some affirm, a brewing of new beer set by old beer maketh it work again. It were good also to enforce the spirits by some mixtures that may excite and quicken them; as by putting into the bottles, nitre, chalk, lime, &c. We see cream is matured and made to rise more speedily by putting in cold water; which, as it seemeth, getteth down the whey.

315. It is tried, that the burying of bottles of drink well stopped, either in dry earth a good depth; or in the bottom of a well within water; and best of all, the hanging of them in a deep well somewhat above the water for some fortnight's space, is an excellent means of making drink fresh and quick; for the cold doth not cause any exhaling of the spirits at all, as heat doth, though it rarifieth the rest that remain; but cold maketh the spirits vigorous, and irritateth them, whereby they incorporate the parts of the liquor perfectly.

316. As for the maturation of fruits, it is wrought by the calling forth of the spirits of the body outward, and so spreading them more smoothly: and likewise by digesting in some degree the grosser parts; and this is effected by heat, motion, attraction, and by a rudiment of putrefaction; for the inception of putrefaction hath in it a maturation.

317. There were taken apples, and laid in straw, in hay, in flour, in chalk, in lime; covered over with onions, covered over with crabs, closed up in wax, shut in a box, &c. There was also an apple hanged up in smoke, of all which the experiment sorted in this manner.

318. After a month's space, the apple enclosed in wax was as green and fresh as at the first putting in, and the kernels continued white. The cause is, for that all exclusion of open air, which is ever predatory, maintaineth the body in its first freshness and moisture; but the inconvenience is, that it tasteth a little of the wax: which I suppose, in a pomegranate, or some such thick-coated fruit, it would not do.

319. The apple hanged in the smoke turned like an old mellow apple, wrinkled, dry, soft, sweet, yellow within. The cause is, for that such a degree of heat, which doth neither melt nor scorch, (for we see that in a greater heat, a roast apple softeneth and melteth; and pigs' feet, made of quarters of wardens, scorch and have a skin of cole,) doth mellow, and not adure: the smoke also maketh the apple, as it were, sprinkled with soot, which helpeth to mature. We see that in drying of pears and prunes in the oven, and removing of them often as they begin to sweat, there is a like operation; but that is with a far more intense degree of heat.

320. The apples covered in the lime and ashes were well matured, as appeared both in their yellowness and sweetness. The cause is, for that that degree of heat which is in lime and ashes, being a smothering heat, is of all the rest most proper, for it doth neither liquefy nor arefy, and that is true maturation. Note, that the taste of those

apples was good, and therefore it is the experiment fittest for use.

321. The apples covered with crabs and onions were likewise well matured. The cause is, not any heat; but for that the crabs and the onions draw forth the spirits of the apple, and spread them equally throughout the body, which taketh away hardness. So we see one apple ripeneth against another. And therefore in making of cider they turn the apples first upon a heap. So one cluster of grapes that toucheth another whilst it groweth, ripeneth faster; "botrus contra botrum citius maturescit."

322. The apples in hay and the straw ripened apparently, though not so much as the other; but the apple in the straw more. The cause is, for that the hay and straw have a very low degree of heat, but yet close and smothering, and which drieth not.

323. The apple in the close box was ripened also: the cause is, for that all air kept close hath a degree of warmth; as we see in wool, fur, plush, &c. Note, that all of these were compared with another apple of the same kind that lay of itself; and in comparison of that were more sweet and more yellow, and so appeared to be more ripe.

324. Take an apple or pear, or other like fruit, and roll it upon a table hard: we see in common experience, that the rolling doth soften and sweeten the fruit presently; which is nothing but the smooth distribution of the spirits into the parts; for the unequal distribution of the spirits maketh the harshness: but this hard rolling is between concoction and a simple maturation; therefore, if you should roll them but gently, perhaps twice a day, and continue it some seven days, it is like they would mature more finely, and like unto the natural maturation.

325. Take an apple, and cut out a piece of the top, and cover it, to see whether that solution of continuity will not hasten a maturation: we see that where a wasp, or a fly, or a worm hath bitten, in a grape, or any fruit, it will sweeten hastily.

326. Take an apple, &c., and prick it with a pin full of holes, not deep, and smear it a little with sack, or cinnamon water, or spirit of wine, every day for ten days, to see if the virtual heat of the wine or strong waters will not mature it.

In these trials also, as was used in the first, set another of the same fruits by to compare them, and try them by their yellowness and by their sweetness.

Experiment solitary touching the making of gold.

The world hath been much abused by the opinion of making of gold: the work itself I judge to be possible; but the means hitherto propounded to effect it are, in the practice, full of error and imposture, and in the theory, full of unsound imaginations. For to say, that nature hath an intention to make all metals gold; and that, if she were delivered from impediments, she would perform her own work; and that, if the crudities, impurities, and leprosities of metals were cured, they would become gold; and that a little quantity of the medicine, in the work of projection, will turn a sea of the baser metal into gold by multiplying: all these are but dreams; and so are many other grounds of alchymy. And to help the matter, the alchymists call in likewise many vanities out of astrology, natural magic, superstitious interpretations of Scriptures, auricular traditions, feigned testimonies of ancient authors, and the like. It is true, on the other side, they have brought to light not a few profitable experiments, and thereby made the world some amends. But we, when we shall come to handle the version and transmutation of bodies, and the experiments concerning metals and minerals, will lay open the true ways and passages of nature, which may lead to this great effect. And we commend the wit of the Chinese, who despair of making of gold, but are mad upon the making of silver: for certain it is, that it is more difficult to make gold, which is the most ponderous and materiate amongst metals, of other metals less ponderous and less materiate, than "via versa," to make silver of lead or quicksilver, both which are more ponderous than silver: so that they need rather a further degree of fixation than any condensation. In the mean time, by occasion of handling the axioms touching maturation, we will direct a trial touching the maturing of metals, and thereby turning some of them into gold: for we conceive indeed, that a perfect good concoction, or digestion, or maturation of some metals, will produce gold. And hereby, we call to mind, that we knew a Dutchman, that had wrought himself into the belief of a great person, by undertaking that he could make gold: whose discourse was, that gold might be made; but that the alchymists over-fired the work: for, he said, the making of gold did require a very temperate heat, as being in nature a subterrany work, where little heat cometh; but yet more to the making of gold than of any other metal; and therefore that he would do it with a great lamp that should carry a temperate and equal heat; and that it was the work of many months. The device of the lamp was folly; but the over-firing now used, and the equal heat to be required, and the making it a work of some good time, are no ill discourses.

We resort therefore to our axioms of maturation, in effect touched before. The first is, that there be used a temperate heat; for they are ever temperate heats that digest and mature: wherein we mean temperate according to the nature of the subject; for that may be temperate to fruits and liquors, which will not work at all upon metals. The second is, that the spirits of the metal be quickened, and the tangible parts opened: for without those two operations, the spirit of the metal wrought upon will not be able to digest the parts.

The third is, that the spirits do spread themselves even, and move not subsultorily, for that will make the parts close and pliant. And this requireth a heat that doth not rise and fall, but continue as equal as may be. The fourth is, that no part of the spirit be omitted but detained: for if there be emission of spirit, the body of the metal will be hard and churlish. And this will be performed, partly by the temper of the fire, and partly by the closeness of the vessel. The fifth is, that there be choice made of the likeliest and best prepared metal for the version, for that will facilitate the work. The sixth is, that you give time enough for the work; not to prolong hopes, as the alchymists do, but indeed to give nature a convenient space to work in. These principles are most certain and true; we will now derive a direction of trial out of them, which may, perhaps, by further meditation, be improved.

327. Let there be a small furnace made of a temperate heat; let the heat be such as may keep the metal perpetually molten, and no more; for that above all importeth to the work. For the material, take silver, which is the metal that in nature symbolizeth most with gold; put in also with the silver, a tenth part of quicksilver, and a twelfth part of nitre, by weight; both these to quicken and open the body of the metal; and so let the work be continued by the space of six months at the least. I wish also, that there be at some times an injection of some oiled substance, such as they use in the recovering of gold, which by vexing with separations hath been made churlish; and this is to lay the parts more close and smooth, which is the main work. For gold, as we see, is the closest, and therefore the heaviest of metals; and is likewise the most flexible and tensible. Note, that to think to make gold of quicksilver, because it is the heaviest, is a thing not to be hoped; for quicksilver will not endure the manage of the fire. Next to silver, I think copper were fittest to be the material.

Experiment solitary touching the nature of gold.

328. Gold hath these natures; greatness of weight, closeness of parts, fixation, pliantness or softness, immunity from rust, colour or tincture of yellow. Therefore the sure way, though most about, to make gold, is to know the causes of the several natures before rehearsed, and the axioms concerning the same. For if a man can make a metal that hath all these properties, let men dispute whether it be gold or no.

Experiments in consort touching the inducing and accelerating of putrefaction.

The inducing and accelerating of putrefaction is a subject of very universal inquiry: for corruption is a reciprocal to generation: and they two are as nature's two terms or boundaries; and the guides to life and death. Putrefaction is the work of the spirits of bodies, which ever are unquiet to get forth and congregate with the air, and to enjoy the sunbeams. The getting forth, or spreading of the spirits, which is a degree of getting forth, hath five differing operations. If the spirits be detained within the body, and move more violently, there followeth colliquation, as in metals, &c. If more mildly, there followeth digestion or maturation, as in drinks and fruits. If the spirits be not merely detained, but protrude a little, and that motion be confused and inordinate, there followeth putrefaction; which ever dissolveth the consistence of the body into much inequality, as in flesh, rotten fruits, shining wood, &c., and also in the rust of metals. But if that motion be in a certain order, there followeth vivification and figuration; as both in living creatures bred of putrefaction, and in living creatures perfect. But if the spirits issue out of the body, there followeth desiccation, induration, consumption, &c., as in brick, evaporation of bodies liquid, &c.

329. The means to induce and accelerate putrefaction, are, first, by adding some crude or watery moisture; as in wetting of any flesh, fruit, wood, with water, &c., for contrariwise unctuous and oily substances preserve.

330. The second is by invitation or excitation: as when a rotten apple lieth close to another apple that is sound; or when dung, which is a substance already putrefied, is added to other bodies. And this is also notably seen in churchyards, where they bury much, where the earth will consume the corpse in far shorter time than other earth will.

331. The third is by closeness and stopping, which detaineth the spirits in prison more than they would; and thereby irritateth them to seek issue; as in corn and clothes, which wax musty; and therefore open air, which they call "aër perflabilis," doth preserve: and this doth appear more evidently in agues, which come, most of them, of obstructions, and penning the humours which thereupon putrefy.

332. The fourth is by solution of continuity; as we see an apple will rot sooner if it be cut or pierced; and so will wood, &c. And so the flesh of creatures alive, where they have received any wound.

333. The fifth is either by the exhaling or by the driving back of the principal spirits which preserve the consistence of the body; so that when their government is dissolved, every part returneth to his nature or homogeny. And this appeareth in urine and blood when they cool, and thereby break: it appeareth also in the gangrene, or mortification of flesh, either by opiates or by intense colds. I conceive also the same effect is in pestilences: for that the malignity of the infecting vapour danceth the principal spirits, and maketh them fly and leave their regiment; and then the humours, flesh, and secondary spirits, do dissolve and break, as in an anarchy.

334. The sixth is, when a foreign spirit, stronger and more eager than the spirit of the body, enter-eth the body, as in the stinging of serpents. And this is the cause generally, that upon all poisons followeth swelling: and we see swelling followeth also when the spirits of the body itself congregate too much, as upon blows and bruises; or when they are pent in too much, as in swelling upon cold. And we see also, that the spirits coming of putrefaction of humours in agues, &c., which may be counted as foreign spirits, though they be bred within the body, do extinguish and suffocate the natural spirits and heat.

335. The seventh is by such a weak degree of heat as setteth the spirits in a little motion, but is not able either to digest the parts, or to issue the spirits; as is seen in flesh kept in a room that is not cool; whereas in a cool and wet larder it will keep longer. And we see that vivification, whereof putrefaction is the bastard brother, is affected by such soft heats; as the hatching of eggs, the heat of the womb, &c.

336. The eighth is by the releasing of the spirits, which before were close kept by the solidness of their coverture, and thereby their appetite of issuing checked; as in the artificial rusts induced by strong waters in iron, lead, &c., and therefore wetting hasteneth rust or putrefaction of any thing, because it softeneth the crust for the spirits to come forth.

337. The ninth is by the interchange of heat and cold, or wet and dry; as we see in the moulding of earth in frosts and sun; and in the more hasty rotting of wood that is sometimes wet, sometimes dry.

338. The tenth is by time, and the work and procedure of the spirits themselves, which cannot keep their station; especially if they be left to themselves, and there be no agitation or local motion: As we see in corn not stirred, and men's bodies not exercised.

339. All moulds are inceptions of putrefaction; as the moulds of pies and flesh; the moulds of oranges and lemons, which moulds afterwards turn into worms, or more odious putrefactions; and therefore commonly prove to be of ill odour. And if the body be liquid, and not apt to putrefy totally, it will cast up a mother in the top, as the mothers of distilled waters.

340. Moss is a kind of mould of the earth and trees. But it may be better sorted as a rudiment of germination, to which we refer it.

Experiments in consort touching prohibiting and preventing putrefaction.

It is an inquiry of excellent use to inquire of the means of preventing or staying putrefaction; for therein consisteth the means of conservation of bodies: for bodies have two kinds of dissolutions; the one by consumption and desiccation, the other by putrefaction. But as for the putrefactions of the bodies of men and living creatures, as in agues, worms, consumptions of the lungs, imposthumes, and ulcers both inwards and outwards, they are a great part of physic and surgery; and therefore we will reserve the inquiry of them to the proper place, where we shall handle medicinal experiments of all sorts. Of the rest we will now enter into an inquiry: wherein much light may be taken from that which hath been said of the means to induce or accelerate putrefaction: for that which caused putrefaction doth prevent and avoid putrefaction.

341. The first means of prohibiting or checking putrefaction is cold: for so we see that meat and drink will last longer unputrefied, or unsoured, in winter than in summer: and we see that flowers and fruits, put in conservatories of snow, keep fresh. And this worketh by the detention of the spirits, and constipation of the tangible parts.

342. The second is astriction: for astriction prohibiteth dissolution; as we see generally in medicines, whereof such as are astringents do inhibit putrefaction: and by the same reason of astringency, some small quantity of oil of vitriol will keep fresh water long from putrefying. And this astriction is in a substance that hath a virtual cold; and it worketh partly by the same means that cold doth.

343. The third is the excluding of the air; and again, the exposing to the air: for these contraries, as it cometh often to pass, work the same effect, according to the nature of the subject matter. So we see, that beer or wine, in bottles close stopped, last long: that the garners under ground keep corn longer than those above ground; and that fruit closed in wax keepeth fresh; and likewise bodies put in honey and flour keep more fresh: and liquors, drinks, and juices, with a little oil cast on the top, keep fresh. Contrariwise, we see that cloth and apparel not aired do breed moths and mould; and the diversity is, that in bodies that need detention of spirits, the exclusion of the air doth good; as in drinks and corn: but in bodies that need emission of spirits to discharge some of the superfluous moisture, it doth hurt, for they require airing.

344. The fourth is motion and stirring; for putrefaction asketh rest: for the subtile motion which putrefaction requireth, is disturbed by any agitation: and all local motion keepeth bodies integral, and their parts together; as we see that turning over of corn in a garner, or letting it run like an hour-glass, from an upper-room into a lower, doth keep it sweet: and running waters putrefy not; and in men's bodies, exercise hindereth putrefaction; and contrariwise, rest and want of motion, or stoppings, whereby the run of humours, or the motion of perspiration, is stayed further putrefaction; as we partly touched a little before.

345. The fifth is the breathing forth of the adventitious moisture in bodies; for as wetting

doth hasten putrefaction, so convenient drying, whereby the more radical moisture is only kept in, putteth back putrefaction; so we see that herbs and flowers, if they be dried in the shade, or dried in the hot sun for a small time, keep best. For the emission of the loose and adventitious moisture doth betray the radical moisture, and carrieth it out for company.

346. The sixth is the strengthening of the spirits of bodies: for as a great heat keepeth bodies from putrefaction, but a tepid heat inclineth them to putrefaction; so a strong spirit likewise preserveth, and a weak or faint spirit disposeth to corruption. So we find that salt water corrupteth not so soon as fresh: and salting of oysters, and powdering of meat, keepeth them from putrefaction. It would be tried also whether chalk put into water, or drink, doth not preserve it from putrefying or speedy souring. So we see that strong beer will last longer than small; and all things that are hot and aromatical do help to preserve liquors, or powders, &c., which they do as well by strengthening the spirits as by soaking out the loose moisture.

347. The seventh is separation of the cruder parts, and thereby making the body more equal; for all imperfect mixture is apt to putrefy; and watery substances are more apt to putrefy than oily. So we see distilled waters will last longer than raw waters; and things that have passed the fire do last longer than those that have not passed the fire, as dried pears, &c.

348. The eighth is the drawing forth continually of that part where the putrefaction beginneth; which is, commonly, the loose and watery moisture; not only for the reason before given, that it provoketh the radical moisture to come forth with it; but because being detained in the body, the putrefaction taking hold of it, infecteth the rest: as we see in the embalming of dead bodies; and the same reason is of preserving herbs, or fruits, or flowers, in bran or meal.

349. The ninth is the commixture of any thing that is more oily or sweet: for such bodies are least apt to putrefy, the air worketh little upon them, and they not putrefying, preserve the rest. And therefore we see syrups and ointments will last longer than juices.

350. The tenth is the commixture of somewhat that is dry; for putrefaction beginneth first from the spirits and then from the moisture; and that that is dry is unapt to putrefy: and therefore smoke preserveth flesh; as we see in bacon and neats' tongues, and Martlemas beef, &c.

351. The opinion of some of the ancients, that blown airs do preserve bodies longer than other airs, seemeth to me probable; for that the blown airs, being overcharged and compressed, will hardly receive the exhaling of any thing, but rather repulse it. It was tried in a blown bladder, wherein flesh was put, and likewise a flower, and it sorted not: for dry bladders will not blow: and new bladders rather further putrefaction: the way were therefore to blow strongly with a pair of bellows into a hogshead, putting into the hogshead, before, that which you would have preserved; and in the instant that you withdraw the bellows, stop the hole close.

Experiment solitary touching wood shining in the dark.

352. The experiment of wood that shineth in the dark, we have diligently driven and pursued: the rather, for that of all things that give light here below, it is the most durable, and hath least apparent motion. Fire and flame are in continual expense; sugar shineth only while it is in scraping; and saltwater while it is in dashing; glow-worms have their shining while they live, or a little after; only scales of fishes putrefied seem to be of the same nature with shining wood: and it is true, that all putrefaction hath with it an inward motion, as well as fire or light. The trial sorted thus: 1. The shining is in some pieces more bright, in some more dim; but the most bright of all doth not attain to the light of a glow-worm. 2. The woods that have been tried to shine, are chiefly sallow and willow; also the ash and hazle; it may be it holdeth in others. 3. Both root and bodies do shine, but the roots better. 4. The colour of the shining part, by day-light, is in some pieces white, in some pieces inclining to red; which in the country they call the white and red garret. 5. The part that shineth is, for the most part, somewhat soft, and moist to feel to, but some was found to be firm and hard, so as it might be figured into a cross, or into beads, &c. But you must not look to have an image, or the like, in any thing that is lightsome; for even a face in iron red-hot will not be seen, the light confounding the small differences of lightsome and darksome, which show the figure. 6. There was the shining part pared off, till you came to that that did not shine; but within two days the part contiguous began also to shine, being laid abroad in the dew: so as it seemeth the putrefaction spreadeth. 7. There was other dead wood of like kind that was laid abroad, which shined not at the first; but after a night's lying abroad began to shine. 8. There was other wood that did first shine; and being laid dry in the house, within five or six days lost the shining; and laid abroad again, recovered the shining. 9. Shining woods being laid in a dry room, within a seven-night lose their shining; but being laid in a cellar, or dark room, keeps the shining. 10. The boring of holes in that kind of wood, and then laying it abroad, seemeth to conduce to make it shine: the cause is, for that all solution of continuity doth help on putrefaction, as was touched before 11. No wood hath been yet tried to shine, that was cut down alive, but such as was rotted both in stock

and root while it grew. 12. Part of the wood that shined was steeped in oil, and retained the shining a fortnight. 13. The like succeeded in some steeped in water, and much better. 14. How long the shining will continue, if the wood be laid abroad every night, and taken in and sprinkled with water in the day, is not yet tried. 15. Trial was made of laying it abroad in frosty weather, which hurt it not. 16. There was a great piece of a root which did shine, and the shining part was cut off till no more shined; yet after two nights, though it were kept in a dry room, it got a shining.

Experiment solitary touching the acceleration of birth.

353. The bringing forth of living creatures may be accelerated in two respects: the one, if the embryo ripeneth and perfecteth sooner: the other, if there be some cause from the mother's body, of expulsion or putting it down: whereof the former is good, and argueth strength; the latter is ill, and cometh by accident or disease. And therefore the ancient observation is true, that the child born in the seventh month doth commonly well; but born in the eighth month, doth for the most part die. But the cause assigned is fabulous; which is, that in the eighth month should be the return of the reign of the planet Saturn, which as they say, is a planet malign; whereas in the seventh is the reign of the moon, which is a planet propitious. But the true cause is, for that where there is so great a prevention of the ordinary time, it is the lustiness of the child; but when it is less, it is some indisposition of the mother.

Experiment solitary touching the acceleration of growth and stature.

354. To accelerate growth or stature, it must proceed either from the plenty of the nourishment, or from the nature of the nourishment, or from the quickening and exciting of the natural heat. For the first excess of nourishment is hurtful; for it maketh the child corpulent; and growing in breadth rather than in height. And you may take an experiment from plants, which if they spread much are seldom tall. As for the nature of the nourishment; first, it may not be too dry, and therefore children in dairy countries do wax more tall, than where they feed more upon bread and flesh. There is also a received tale, that boiling of daisy roots in milk, which it is certain are great driers, will make dogs little. But so much is true, that an over-dry nourishment in childhood putteth back stature. Secondly, the nourishment must be of an opening nature, for that attenuateth the juice, and furthereth the motion of the spirits upwards. Neither is it without cause, that Xenophon, in the nurture of the Persian children, doth so much commend their feeding upon cardamon, which, he saith, made them grow better, and be of a more active habit. Cardamon is in Latin "nasturtium," and with us water-cresses; which, it is certain, is an herb that, whilst it is young, is friendly to life. As for the quickening of natural heat, it must be done chiefly with exercise; and therefore no doubt much going to school, where they sit so much, hindereth the growth of children; whereas country people that go not to school are commonly of better stature. And again men must beware how they give children any thing that is cold in operation, for even long sucking doth hinder both wit and stature. This hath been tried, that a whelp that hath been fed with nitre in milk hath become very little, but extreme lively: for the spirit of nitre is cold. And though it be an excellent medicine in strength of years for prolongation of life; yet it is in children and young creatures an enemy to growth: and all for the same reason, for heat is requisite to growth; but after a man is come to his middle age, heat consumeth the spirits, which the coldness of the spirit of nitre doth help to condense and correct.

Experiments in consort touching sulphur and mercury, two of Paracelsus's principles.

There be two great families of things, you may term them by several names; sulphurous and mercurial, which are the chymists' words, for as for their "sal," which is their third principle, it is a compound of the other two; inflammable and not inflamable; mature and crude, oily and watery. For we see that in subterranies there are, as the fathers of their tribes, brimstone and mercury; in vegetables and living creatures there is water and oil: in the inferior order of pneumaticals there is air and flame, and in the superior there is the body of the star and the pure sky. And these pairs, though they be unlike in the primitive differences of matter, yet they seem to have many consents: for mercury and sulphur are principal materials of metals; water and oil are principal materials of vegetables and animals, and seem to differ but in maturation or concoction: flame, in vulgar opinion, is but air incensed; and they both have quickness of motion, and facility of cession, much alike: and the interstellar sky, though the opinion be vain, that the star is the denser part of his orb, hath notwithstanding so much affinity with the star, that there is a rotation of that, as well as of the star. Therefore it is one of the greatest "magnalia naturæ," to turn water or watery juice into oil or oily juice: greater in nature than to turn silver or quicksilver into gold.

355. The instances we have wherein crude and watery substance turneth into fat and oily, are of four kinds. First in the mixture of earth and water; which mingled by the help of the sun gather a nitrous fatness, more than either of them have severally; as we see in that they put forth plants, which need both juices.

356. The second is in the assimilation of nourishment, made in the bodies of plants and living creatures, whereof plants turn the juice of mere water and earth into a great deal of oily matter: living creatures, though much of their fat and flesh are out of oily aliments, as meat and bread, yet they assimilate also in a measure their drink of water, &c. But these two ways of version of water into oil, namely, by mixture and by assimilation, are by many passages and percolations, and by long continuance of soft heats, and by circuits of time.

357. The third is the inception of putrefaction; as in water corrupted: and the mothers of waters distilled; both which have a kind of fatness or oil.

358. The fourth is in the dulcoration of some metals, as "saccharum Saturni, &c."

359. The intention of version of water into a more oily substance is by digestion; for oil is almost nothing else but water digested, and this digestion is principally by heat, which heat must be either outward or inward: again, it may be by provocation or excitation, which is caused by the mingling of bodies already oily or digested: for they will somewhat communicate their nature with the rest. Digestion also is strongly effected by direct assimilation of bodies crude into bodies digested, as in plants and living creatures, whose nourishment is far more crude than their bodies: but this digestion is by a great compass, as hath been said. As for the more full handling of these two principles, whereof this is but a taste, the inquiry of which is one of the profoundest inquiries of nature, we leave it to the title of version of bodies, and likewise to the title of the first congregations of matter; which, like a general assembly of estate, doth give law to all bodies.

Experiment solitary touching chameleons.

360. A chameleon is a creature about the bigness of an ordinary lizard: his head unproportionably big: his eyes great: he moveth his head without the writhing of his neck, which is inflexible, as a hog doth: his back crooked; his skin spotted with little tumours, less eminent nearer the belly; his tail slender and long: on each foot he hath five fingers, three on the outside, and two on the inside; his tongue of a marvellous length in respect of his body, and hollow at the end; which he will launch out to prey upon flies. Of colour green, and of a dusky yellow, brighter and whiter towards the belly; yet spotted with blue, white, and red. If he be laid upon green, the green predominateth; if upon yellow, the yellow; not so if he be laid upon blue, or red, or white; only the green spots receive a more orient lustre, laid upon black he looketh all black, though not without a mixture of green. He feedeth not only upon air, though that be his principal sustenance, for sometimes he taketh flies, as was said, yet some that have kept chameleons a whole year together could never perceive that ever they fed upon any thing else but air, and might observe their bellies to swell after they had exhausted the air, and closed their jaws; which they open commonly against the rays of the sun. They have a foolish tradition in magic, that if a chameleon be burnt upon the top of a house, it will raise a tempest; supposing, according to their vain dreams of sympathies, because he nourisheth with air, his body should have great virtue to make impression upon the air.

Experiment solitary touching subterrany fires.

361. It is reported by one of the ancients, that in part of Media there are eruptions of flames out of plains; and that those flames are clear, and cast not forth such smoke, and ashes, and pumice, as mountain flames do. The reason, no doubt, is, because the flame is not pent, as it is in mountains and earthquakes which cast flame. There be also some blind fires under stone, which flame not out, but oil being poured upon them they flame out. The cause whereof is, for that it seemeth the fire is so choked as not able to remove the stone, it is heat rather than flame, which nevertheless is sufficient to inflame the oil.

Experiment solitary touching nitre.

362. It is reported that in some lakes the water is so nitrous, as if foul clothes be put into it, it scoureth them of itself; and if they stay any whit long, they moulder away. And the scouring virtue of nitre is the more to be noted, because it is a body cold; and we see warm water scoureth better than cold. But the cause is, for that it hath a subtle spirit, which severeth and divideth any thing that is foul and viscous, and sticketh upon a body.

Experiment solitary touching congealing of air.

363. Take a bladder, the greatest you can get, fill it full of wind, and tie it about the neck with a silk thread waxed, and upon that put likewise wax very close; so that when the neck of the bladder drieth, no air may possibly get in nor out. Then bury it three or four foot under the earth in a vault, or in a conservatory of snow, the snow being made hollow about the bladder, and after some fortnight's distance, see whether the bladder be shrunk; for if it be, then it is plain that the coldness of the earth or snow hath condensed the air, and brought it a degree nearer to water: which is an experiment of great consequence.

Experiment solitary touching congealing of water into crystal.

364. It is a report of some good credit, that in deep caves there are pensile crystals, and degrees of crystal that drop from above, and in some other, though more rarely, that rise from below: which

though it be chiefly the work of cold, yet it may be that water that passeth through the earth, gathereth a nature more clammy, and fitter to congeal and become solid than water of itself. Therefore trial would be made, to lay a heap of earth, in great frosts, upon a hollow vessel, putting a canvass between, that it falleth not in: and pour water upon it, in such quantity as will be sure to soak through, and see whether it will not make a harder ice in the bottom of the vessel, and less apt to dissolve than ordinarily. I suppose also that if you make the earth narrower at the bottom than at the top, in fashion of a sugar-loaf reversed, it will help the experiment. For it will make the ice, where it issueth, less in bulk, and evermore smallness of quantity is a help to version.

Experiments solitary touching preserving of rose-leaves both in colour and smell.

365. Take damask roses, and pull them, then dry them upon the top of a house, upon a lead or terras, in the hot sun, in a clear day, between the hours only of twelve and two, or thereabouts. Then put them into a sweet dry earthen bottle, or a glass, with narrow mouths, stuffing them close together, but without bruising: stop the bottle or glass close, and these roses will retain not only their smell perfect, but their colour fresh, for a year at least. Note, that nothing doth so much destroy any plant, or other body, either by putrefaction or arefaction, as the adventitious moisture which hangeth loose in the body, if it be not drawn out. For it betrayeth and tolleth forth the innate and radical moisture along with it when itself goeth forth. And therefore in living creatures, moderate sweat doth preserve the juice of the body. Note, that these roses, when you take them from the drying, have little or no smell; so that the smell is a second smell, that issueth out of the flower afterwards.

Experiments in consort touching the continuance of flame.

366. The continuance of flame, according unto the diversity of the body inflamed, and other circumstances, is worthy the inquiry; chiefly, for that though flame be almost of a momentary lasting, yet it receiveth the more, and the less: we will first therefore speak at large of bodies inflamed wholly and immediately, without any wick to help the inflammation. A spoonful of spirit of wine, a little heated, was taken, and it burnt as long as came to a hundred and sixteen pulses. The same quantity of spirit of wine mixed with the sixth part of a spoonful of nitre, burnt but to the space of ninety-four pulses. Mixed with the like quantity of bay-salt, eighty-three pulses. Mixed with the like quantity of gunpowder, which dissolved into a black water, one hundred and ten pulses. A cube or pallet of yellow wax was taken, as much as half the spirit of wine, and set in the midst, and it burnt only to the space of eighty-seven pulses. Mixed with the sixth part of a spoonful of milk, it burnt to the space of one hundred pulses; and the milk was curdled. Mixed with the sixth part of a spoonful of water, it burnt to the space of eighty-six pulses, with an equal quantity of water, only to the space of four pulses. A small pebble was laid in the midst, and the spirit of wine burnt to the space of ninety-four pulses. A piece of wood of the bigness of an arrow, and about a finger's length, was set up in the midst, and the spirit of wine burnt to the space of ninety-four pulses. So that the spirit of wine simple endured the longest; and the spirit of wine with the bay-salt, and the equal quantity of water, were the shortest.

367. Consider well, whether the more speedy going forth of the flame be caused by the greater vigour of the flame in burning, or by the resistance of the body mixed, and the aversion thereof to take flame; which will appear by the quantity of the spirit of wine that remaineth after the going out of the flame. And it seemeth clearly to be the latter; for that the mixture of things least apt to burn is the speediest in going out. And note, by the way, that spirit of wine burned till it go out of itself will burn no more: and tasteth nothing so hot in the mouth as it did: no, nor yet sour, as if it were a degree towards vinegar, which burnt wine doth; but flat and dead.

368. Note, that in the experiment of wax aforesaid, the wax dissolved in the burning, and yet did not incorporate itself with spirit of wine to produce one flame; but wheresoever the wax floated, the flame forsook it, till at last it spread all over, and put the flame quite out.

369. The experiments of the mixtures of the spirit of wine inflamed are things of discovery, and not of use: but now we will speak of the continuance of flames, such are used for candles, lamps, or tapers; consisting of inflammable matters, and of a wick that provoketh inflammation. And this importeth not only discovery, but also use and profit; for it is a great saving in all such lights, if they can be made as fair and bright as others, and yet last longer. Wax pure made into a candle, and wax mixed severally into candle-stuff, with the particulars that follow, viz. water, aqua vitæ, milk, bay-salt, oil, butter, nitre, brimstone, saw-dust, every of these bearing a sixth part to the wax; and every of these candles mixed, being of the same weight and wick with the wax pure, proved thus in the burning and lasting. The swiftest in consuming was that with saw-dust; which first burned fair till some part of the candle was consumed, and the dust gathered about the snaste; but then it made the snaste big and long, and to burn duskishly, and the candle wasted in half the time of the wax pure. The next in swiftness were the oil and butter, which consumed by a fifth part swifter

than the pure wax. Then followed in swiftness the clear wax itself. Then the bay-salt, which lasted about an eighth part longer than the clear wax. Then followed the aqua vitæ, which lasted about a fifth part longer than the clear wax. Then followed the milk and water with little difference from the aqua vitæ, but the water slowest. And in these four last, the wick would spit forth little sparks. For the nitre, it would not hold lighted above some twelve pulses, but all the while it would spit out portions of flame, which afterwards would go out into a vapour. For the brimstone, it would hold lighted much about the same time with the nitre; but then after a little while it would harden and cake about the snaste; so that the mixture of bay-salt with wax will win an eighth part of the time of lasting, and the water a fifth.

370. After the several materials were tried, trial was likewise made of several wicks; as of ordinary cotton, sewing thread, rush, silk, straw, and wood. The silk, straw, and wood would flame a little, till they came to the wax, and then go out: of the other three, the thread consumed faster than the cotton, by a sixth part of time; the cotton next; then the rush consumed slower than the cotton, by at least a third part of time. For the bigness of the flame, the cotton and thread cast a flame much alike; and the rush much less and dimmer. *Query*, Whether wood and wicks both, as in torches, consume faster than the wicks simple.

371. We have spoken of the several materials, and the several wicks: but to the lasting of the flame it importeth also, not only what the material is, but the same material whether it be hard, soft, old, new, &c. Good housewives, to make their candles burn longer, use to lay them one by one in bran or flour, which make them harder, and so they consume the slower: insomuch as by this means they will outlast other candles of the same stuff almost half in half. For bran and flour have a virtue to harden; so that both age, and lying in the bran, doth help to the lasting. And we see that wax candles last longer than tallow candles, because wax is more firm and hard.

372. The lasting of flame also dependeth upon the easy drawing of the nourishment; as we see in the Court of England there is a service which they call Allnight; which is as it were a great cake of wax, with the wick in the midst; whereby it cometh to pass, that the wick fetcheth the nourishment farther off. We see also that lamps last longer, because the vessel is far broader than the breadth of a taper or candle.

373. Take a turreted lamp of tin, made in the form of square; the height of the turret being thrice as much as the length of the lower part whereupon the lamp standeth: make only one hole in it, at the end of the return farthest from the turret. Reverse it, and fill it full of oil by that hole; and then set it upright again; and put a wick in at the hole, and lighten it; you shall find that it will burn slow, and a long time: which is caused, as was said last before, for that the flame fetcheth the nourishment afar off. You shall find also, that as the oil wasteth and descendeth, so the top of the turret by little and little filleth with air; which is caused by the rarefaction of the oil by the heat. It were worthy the observation to make a hole in the top of the turret, and to try when the oil is almost consumed, whether the air made of the oil, if you put to it a flame of a candle, in the letting of it forth, will inflame. It were good also to have the lamp made, not of tin, but glass, that you may see how the vapour or air gathereth by degrees in the top.

374. A fourth point that importeth the lasting of the flame, is the closeness of the air wherein the flame burneth. We see that if wind bloweth upon a candle it wasteth apace. We see also it lasteth longer in a lantern than at large. And there are traditions of lamps and candles, that have burnt a very long time in caves and tombs.

375. A fifth point that importeth the lasting of the flame, is the nature of the air where the flame burneth; whether it be cold or hot, moist or dry The air, if it be very cold, irritateth the flame, and maketh it burn more fiercely, as fire scorcheth in frosty weather, and so furthereth the consumption. The air once heated, I conceive, maketh the flame burn more mildly, and so helpeth the continuance. The air, if it be dry, is indifferent: the air, if it be moist, doth in a degree quench the flame, as we see lights will go out in the damps of mines, and howsoever maketh it burn more dully, and so helpeth the continuance.

Experiments in consort touching burials or infusions of divers bodies in earth.

376. Burials in earth serve for preservation, and for condensation, and for induration of bodies. And if you intend condensation or induration, you may bury the bodies so as earth may touch them: as if you will make artificial porcelane, &c. And the like you may do for conservation, if the bodies be hard and solid; as clay, wood, &c. But if you intend preservation of bodies more soft and tender, then you must do one of these two: either you must put them in cases, whereby they may not touch the earth, or else you must vault the earth, whereby it may hang over them and not touch them: for if the earth touch them, it will do more hurt by the moisture, causing them to putrefy, than good by the virtual cold, to conserve them, except the earth be very dry and sandy.

377. An orange, lemon, and apple, wrapt in a linen cloth, being buried for a fortnight's space four foot deep within the earth, though it were in a moist place, and a rainy time, yet came forth noways mouldy or rotten, but were become a little harder than they were; otherwise fresh in

their colour; but their juice somewhat flatted. But with the burial of a fortnight more they became putrefied.

378. A bottle of beer, buried in like manner as before, became more lively, better tasted, and clearer than it was. And a bottle of wine in like manner. A bottle of vinegar so buried came forth more lively and more odoriferous, smelling almost like a violet. And after the whole month's burial, all the three came forth as fresh and lively, if not better than before.

379. It were a profitable experiment to preserve oranges, lemons, and pomegranates, till summer, for then their price will be mightily increased. This may be done, if you put them in a pot or vessel well covered, that the moisture of the earth come not at them; or else by putting them in a conservatory of snow. And generally, whosoever will make experiments of cold, let him be provided of three things; a conservatory of snow; a good large vault, twenty foot at least under the ground; and a deep well.

380. There hath been a tradition, that pearl, and coral, and turquois-stone, that have lost their colours, may be recovered by burying in the earth, which is a thing of great profit, if it would sort: but upon trial of six weeks' burial, there followed no effect. It were good to try it in a deep well, or in a conservatory of snow; there the cold may be more constringent; and so make the body more united, and thereby more resplendent.

Experiment solitary touching the effects in men's bodies from several winds.

381. Men's bodies are heavier, and less disposed to motion, when southern winds blow than when northern. The cause is, for that when the southern winds blow, the humours do in some degree melt and wax fluid, and so flow into the parts; as it is seen in wood and other bodies, which, when the southern winds blow, do swell. Besides, the motion and activity of the body consisteth chiefly in the sinews, which, when the southern wind bloweth are more relax.

Experiment solitary touching winter and summer sicknesses.

382. It is commonly seen that more are sick in the summer, and more die in the winter; except it be in pestilent diseases, which commonly reign in summer or autumn. The reason is, because diseases are bred, indeed, chiefly by heat; but then they are cured most by sweat and purge; which in the summer cometh on or is provoked more easily. As for pestilent diseases, the reason why most die of them in summer is, because they are bred most in the summer: for otherwise those that are touched are in most danger in the winter.

Experiment solitary touching pestilential seasons.

383. The general opinion is, that years hot and moist are most pestilent; upon the superficial ground that heat and moisture cause putrefaction. In England it is found not true; for many times there have been great plagues in dry years. Whereof the cause may be, for that drought, in the bodies of islanders habituate to moist airs, doth exasperate the humours, and maketh them more apt to putrefy or inflame: besides, it tainteth the waters, commonly, and maketh them less wholesome. And again, in Barbary, the plagues break up in the summer months, when the weather is hot and dry.

Experiment solitary touching an error received about epidemical diseases.

384. Many diseases, both epidemical and others, break forth at particular times. And the cause is falsely imputed to the constitution of the air at that time when they break forth or reign; whereas it proceedeth, indeed, from a precedent sequence and series of the seasons of the year: and therefore Hippocrates in his prognostics doth make good observations of the diseases that ensue upon the nature of the precedent four seasons of the year.

Experiment solitary touching the alteration or preservation of liquors in wells or deep vaults.

385. Trial hath been made with earthen bottles well stopped, hanged in a well of twenty fathom deep at the least, and some of the bottles have been let down into the water, some others have hanged above, within about a fathom of the water; and the liquors so tried have been beer, not new, but ready for drinking, and wine, and milk. The proof hath been, that both the beer and the wine, as well within the water as above, hath not been palled or deaded at all; but as good or somewhat better than bottles of the same drinks and staleness kept in a cellar. But those which did hang above water were apparently the best; and that beer did flower a little; whereas that under water did not, though it were fresh. The milk soured and began to putrefy. Nevertheless it is true, that there is a village near Blois, where in deep caves they do thicken milk in such sort that it becometh very pleasant: which was some cause of this trial of hanging milk in the well: but our proof was naught; neither do I know whether that milk in those caves be first boiled. It were good therefore to try it with milk sodden, and with cream; for that milk of itself is such a compound body, of cream, curds, and whey, as it is easily turned and dissolved. It were good also to try the beer when it is in wort, that it may be seen whether the hanging in the well will accelerate the ripening and clarifying of it.

Experiment solitary touching stutting.

386. Divers, we see, do stut. The cause may be, in most the refrigeration of the tongue;

whereby it is less apt to move. And therefore we see that naturals do generally stut: and we see, that in those that stut, if they drink wine moderately they stut less, because it heateth, and so we see that they that stut do stut more in the first offer to speak than in continuance; because the tongue is by motion somewhat heated. In some also, it may be, though rarely, the dryness of the tongue, which likewise maketh it less apt to move as well as cold: for it is an affect that cometh to some wise and great men; as it did unto Moses, who was "linguæ præpeditæ;" and many stutters, we find, are very choleric men: choler inducing a dryness in the tongue.

Experiments in consort touching smells.

387. Smells and other odours are sweeter in the air at some distance, than near the nose; as hath been partly touched heretofore. The cause is double: first, the finer mixture or incorporation of the smell: for we see that in sounds likewise, they are sweetest when we cannot hear every part by itself. The other reason is, for that all sweet smells have joined with them some earthly or crude odours; and at some distance the sweet, which is the more spiritual, is perceived, and the earthy reaches not so far.

388. Sweet smells are most forcible in dry substances when they are broken; and so likewise in oranges or lemons, the nipping of their rind giveth out their smell more: and generally when bodies are moved or stirred, though not broken, they smell more, as a sweet-bag waved. The cause is double: the one, for that there is a greater emission of the spirit when way is made; and this holdeth in the breaking, nipping, or crushing; it holdeth also, in some degree, in the moving; but in this last there is a concurrence of the second cause, which is the impulsion of the air that bringeth the scent faster upon us.

389. The daintiest smells of flowers are out of those plants whose leaves smell not; as violets, roses, wallflowers, gillyflowers, pinks, woodbines, vine-flowers, apple-blooms, limetree-blooms, bean-blooms, &c. The cause is, for that where there is heat and strength enough in the plant to make the leaves odorate, there the smell of the flower is rather evanid and weaker than that of the leaves; as it is in rosemary flowers, lavender flowers, and sweet-briar roses. But where there is less heat, there the spirit of the plant is digested and refined, and severed from the grosser juice, in the efflorescence, and not before.

390. Most odours smell best broken or crushed, as hath been said: but flowers pressed or beaten do lose the freshness and sweetness of their odour. The cause is, for that when they are crushed, the grosser and more earthy spirit cometh out with the finer, and troubleth it; whereas in stronger odours there are no such degrees of the issue of the smell.

Experiments in consort touching the goodness and choice of water.

391. It is a thing of very good use to discover the goodness of waters. The taste, to those that drink water only, doth somewhat: but other experiments are more sure. First, try waters by weight, wherein you may find some difference, though not much; and the lighter you may account the better.

392. Secondly try them by boiling upon an equal fire; and that which consumeth away fastest, you may account the best.

393. Thirdly, try them in several bottles or open vessels, matches in every thing else, and see which of them last longest without stench or corruption. And that which holdeth unputrefied longest, you may likewise account the best.

394. Fourthly, try them by making drinks stronger or smaller, with the same quantity of malt; and you may conclude, that that water which maketh the stronger drink is the more concocted and nourishing; though perhaps it be not so good for medicinal use. And such water, commonly, is the water of large and navigable rivers; and likewise in large and clean ponds of standing water; for upon both them the sun hath more power than upon fountains or small rivers. And I conceive that chalk water is next them the best for going furthest in drink: for that also helpeth concoction; so it be out of a deep well, for then it cureth the rawness of the water; but chalky water, towards the top of the earth, is too fretting; as it appeareth in laundry of clothes, which wear out apace if you use such waters.

395. Fifthly, the housewives do find a difference in waters, for the bearing or not bearing of soap; and it is likely that the more fat water will bear soap best; for the hungry water doth kill the unctuous nature of the soap.

396. Sixthly, you may make a judgment of waters according to the place whence they spring or come: the rain-water is, by the physicians, esteemed the finest and the best; but yet it is said to putrefy soonest, which is likely, because of the fineness of the spirit: and in conservatories of rain-water, such as they have in Venice, &c., they are found not so choice waters; the worse, perhaps, because they are covered aloft and kept from the sun. Snow-water is held unwholesome; insomuch as the people that dwell at the foot of the snow mountains, or otherwise upon the ascent, especially the women, by drinking of snow-water, have great bags hanging under their throats. Well-water, except it be upon chalk, or a very plentiful spring, maketh meat red; which is an ill sign. Springs on the tops of high hills are the best: for both they seem to have a lightness and appetite of mounting; and besides, they are most pure and unmingled; and again, are more percolated through a great space of earth. For

waters in valleys join in effect under ground with all waters of the same level; whereas springs on the tops of hills pass through a great deal of pure earth with less mixture of other waters.

397. Seventhly, judgment may be made of waters by the soil whereupon the water runneth; as pebble is the cleanest and best tasted; and next to that clay-water; and thirdly, water upon chalk; fourthly, that upon sand; and worst of all upon mud. Neither may you trust waters that taste sweet, for they are commonly found in rising grounds of great cities, which must needs take in a great deal of filth.

Experiment solitary touching the temperate heat under the equinoctial.

398. In Peru, and divers parts of the West Indies, though under the line, the heats are not so intolerable as they be in Barbary, and the skirts of the torrid zone. The causes are, first the great breezes which the motion of the air in great circles, such as are under the girdle of the world, produceth, which do refrigerate; and therefore in those parts noon is nothing so hot, when the breezes are great, as about nine or ten of the clock in the forenoon. Another cause is, for that the length of the night, and the dews thereof, do compensate the heat of the day. A third cause is, the stay of the sun; not in respect of day and night, for that we spake of before, but in respect of the season; for under the line the sun crosseth the line, and maketh two summers and two winters, but in the skirts of the torrid zone it doubleth and goeth back again, and so maketh one long summer.

Experiment solitary touching the coloration of black and tawny Moors.

399. The heat of the sun maketh men black in some countries, as in Æthiopia and Guiney, &c. Fire doth it not, as we see in glass-men, that are continually about the fire. The reason may be, because fire doth lick up the spirits and blood of the body, so as they exhale, so that it ever maketh men look pale and sallow; but the sun, which is a gentler heat, doth but draw the blood to the outward parts, and rather concocteth it than soaketh it; and therefore we see that all Æthiopes are fleshy and plump, and have great lips, all which betoken moisture retained, and not drawn out. We see also, that the Negroes are bred in countries that have plenty of water, by rivers and otherwise; for Meroë, which was the metropolis of Æthiopia, was upon a great lake; and Congo, where the Negroes are, is full of rivers. And the confines of the river Niger, where the Negroes also are, are well watered: and the region above Cape Verde is likewise moist, insomuch as it is pestilent through moisture: but the countries of the Abyssenes, and Barbary, and Peru, where they are tawny, and olivaster, and pale, are generally more sandy and dry. As for the Æthiopes, as they are plump and fleshy, so, it may be, they are sanguine and ruddy coloured, if their black skin would suffer it to be seen.

Experiment solitary touching motion after the instant of death.

400. Some creatures do move a good while after their head is off, as birds; some a very little time, as men and all beasts; some move, though cut in several pieces, as snakes, eels, worms, flies, &c. First, therefore, it is certain, that the immediate cause of death is the resolution or extinguishment of the spirits; and that the destruction or corruption of the organs is but the mediate cause. But some organs are so peremptorily necessary, that the extinguishment of the spirits doth speedily follow; but yet so as there is an interim of a small time. It is reported by one of the ancients of credit, that a sacrificed beast hath lowed after the heart hath been severed; and it is a report also of credit, that the head of a pig hath been opened, and the brain put into the palm of a man's hand, trembling, without breaking any part of it, or severing it from the marrow of the back-bone, during which time the pig hath been, in all appearance, stark dead, and without motion; and after a small time the brain hath been replaced, and the skull of the pig closed, and the pig hath a little after gone about. And certain it is, that an eye, upon revenge, hath been thrust forth, so as it hanged a pretty distance by the visual nerve; and during that time the eye hath been without any power of sight; and yet after being replaced recovered sight. Now the spirits are chiefly in the head and cells of the brain, which in men and beasts are large; and therefore, when the head is off, they move little or nothing. But birds have small heads, and therefore the spirits are a little more dispersed in the sinews, whereby motion remaineth in them a little longer; insomuch as it is extant in story, that an emperor of Rome, to show the certainty of his hand, did shoot a great forked arrow at an ostrich, as she ran swiftly upon the stage, and struck off her head, and yet she continued the race a little way with her head off. As for worms, and flies, and eels, the spirits are diffused almost all over, and therefore they move in their several pieces.

CENTURY V.

Experiments in consort touching the acceleration of germination.

WE will now inquire of plants or vegetables, and we shall do it with diligence. They are the principal part of the third day's work. They are the first "producat," which is the word of animation: for the other words are but the words of essence. And they are of excellent and general use for food, medicine, and a number of mechanical arts.

401. There were sown in a bed, turnip-seed, radish-seed, wheat, cucumber-seed, and peas. The bed we call a hot-bed, and the manner of it is this: there was taken horse-dung, old and well rotted; this was laid upon a bank half a foot high, and supported round about with planks; and upon the top was cast sifted earth, some two fingers' deep, and then the seed sprinkled upon it, having been steeped all night in water mixed with cow-dung. The turnip-seed and the wheat came up half an inch above ground within two days after, without any watering. The rest, the third day. The experiment was made in October; and, it may be in the spring, the accelerating would have been the speedier. This is a noble experiment; for without this help they would have been four times as long in coming up. But there doth not occur to me, at this present, any use thereof for profit, except it should be for sowing of peas, which have their prices very much increased by the early coming. It may be tried also with cherries, strawberries, and other fruit, which are dearest when they come early.

402. There was wheat steeped in water mixed with cow-dung; other in water mixed with horse-dung; other in water mixed with pigeon-dung; other in urine of man, other in water mixed with chalk powdered, other in water mixed with soot, other in water mixed with ashes, other in water mixed with bay-salt, other in claret wine, other in malmsey, other in spirit of wine. The proportion of the mixture was a fourth part of the ingredients to the water; save that there was not of the salt above an eighth part. The urine, and the wines, and the spirit of wine, were simple without mixture of water. The time of the steeping was twelve hours. The time of the year October. There was also other wheat sown unsteeped, but watered twice a day with warm water. There was also other wheat sown simple, to compare it with the rest. The event was, that those that were in the mixture of dung, and urine, and soot, chalk, ashes and salt, came up within six days: and those that afterwards proved the highest, thickest and most lusty, were first the urine, and then the dungs, next the chalk, next the soot, next the ashes, next the salt, next the wheat simple of itself unsteeped and unwatered, next the watered twice a day with warm water, next the claret wine. So that these three last were slower than the ordinary wheat of itself, and this culture did rather retard than advance. As for those that were steeped in malmsey, and spirit of wine, they came not up at all. This is a rich experiment for profit; for the most of the steepings are cheap things, and the goodness of the crop is a great matter of gain, if the goodness of the crop answer the earliness of the coming up, as it is like it will, both being from the vigour of the seed, which also partly appeared in the former experiments, as hath been said. This experiment would be tried in other grains, seeds, and kernels: for it may be some steeping will agree best with some seeds. It would be tried also with roots steeped as before, but for longer time. It would be tried also in several seasons of the year, especially in the spring.

403. Strawberries watered now and then, as once in three days, with water wherein hath been steeped sheeps-dung or pigeons-dung, will prevent and come early. And it is like the same effect would follow in other berries, herbs, flowers, grains, or trees. And therefore it is an experiment, though vulgar in strawberries, yet not brought into use generally: for it is usual to help the ground with muck, and likewise to recomfort it sometimes with muck put to the roots; but to water it with muck-water, which is like to be more forcible, is not practised.

404. Dung, or chalk, or blood, applied in substance, seasonably, to the roots of trees, doth set them forwards. But to do it unto herbs, without mixture of water or earth, it may be these helps are too hot.

405. The former means of helping germination are either by the goodness and strength of the nourishment, or by the comforting and exciting the spirits in the plant, to draw the nourishment better. And of this latter kind, concerning the comforting of the spirits of the plant, are also the experiments that follow; though they be not applications to the root or seed. The planting of trees warm upon a wall against the south, or south-east sun, doth hasten their coming on and ripening; and the south-east is found to be better than the south-west, though the south-west be the hotter coast. But the cause is chiefly, for that the heat of the morning succeedeth the cold of the night: and partly, because many times the south-west sun is too parching. So likewise the planting of them upon the back of a chimney where a fire is kept, doth hasten their coming on and ripening; nay more, the drawing of the boughs into the inside of a room where a fire is continually kept, worketh the same effect, which hath been

tried with grapes, insomuch as they will come a month earlier than the grapes abroad.

406. Besides the two means of accelerating germination formerly described; that is to say, the mending of the nourishment; and comforting of the spirit of the plant: there is a third, which is the making way for the easy coming to the nourishment, and drawing it. And therefore gentle digging and loosening of the earth about the roots of trees: and the removing herbs and flowers into new earth once in two years, which is the same thing, for the new earth is ever looser, doth greatly further the prospering and earliness of plants.

407. But the most admirable acceleration by facilitating the nourishment is that of water. For a standard of a damask rose with the root on, was set in a chamber where no fire was, upright in an earthen pan, full of fair water, without any mixture, half a foot under the water, the standard being more than two foot high above the water: within the space of ten days the standard did put forth a fair green leaf, and some other little buds, which stood at a stay, without any show of decay or withering, more than seven days. But afterwards that leaf faded, but the young buds did sprout on, which afterward opened into fair leaves in the space of three months, and continued so a while after, till upon removal we left the trial. But note, that the leaves were somewhat paler and lighter-coloured than the leaves used to be abroad. Note, that the first buds were in the end of October; and it is likely that if it had been in the spring time, it would have put forth with greater strength, and, it may be, to have grown on to bear flowers. By this means you may have, as it seemeth, roses set in the midst of a pool, being supported with some stay; which is matter of rareness and pleasure, though of small use. This is the more strange, for that the like rose-standard was put at the same time into water mixed with horse-dung, the horse-dung about the fourth part to the water, and in four month's space, while it was observed, put not forth any leaf, though divers buds at the first, as the other.

408. A Dutch flower that had a bulbous root, was likewise put at the same time all under water, some two or three fingers' deep, and within seven days sprouted, and continued long after further growing. There were also put in, a beet-root, a borage root, and a radish-root, which had all their leaves cut almost close to the roots, and within six weeks had fair leaves, and so continued till the end of November.

409. Note, that if roots, or peas, or flowers, may be accelerated in their coming and ripening, there is a double profit; the one in the high price that those things bear when they come early: the other in the swiftness of their returns: for in some grounds which are strong, you shall have a radish, &c. come in a month, that in other grounds will not come in two, and so make double returns.

410. Wheat also was put into the water, and came not forth at all; so as it seemeth there must be some strength and bulk in the body put into the water, as it is in roots, for grains, or seeds, the cold of the water will mortify. But casually some wheat lay under the pan, which was somewhat moistened by the suing of the pan; which in six weeks, as aforesaid, looked mouldy to the eye, but it was sprouted forth half a finger's length.

411. It seemeth by these instances of water, that for nourishment the water is almost all in all, and that the earth doth but keep the plant upright, and save it from over-heat and over-cold; and therefore is a comfortable experiment for good drinkers. It proveth also that our former opinion, that drink incorporate with flesh or roots, as in capon-beer, &c., will nourish more easily than meat and drink taken severally.

412. The housing of plants, I conceive, will both accelerate germination, and bring forth flowers and plants in the colder seasons: and as we house hot-country plants, as lemons, oranges, myrtles, to save them; so we may house our own country plants, to forward them, and make them come in the cold seasons; in such sort, that you may have violets, strawberries, peas, all winter: so that you sow or remove them at fit times. This experiment is to be referred unto the comforting of the spirit of the plant by warmth, as well as housing their boughs, &c. So then the means to accelerate germination, are in particular eight, in general three.

Experiments in consort touching the putting back or retardation of germination.

413. To make roses, or other flowers come late, it is an experiment of pleasure. For the ancients esteemed much of "rosa sera." And indeed the November rose is the sweetest, having been less exhaled by the sun. The means are these. First, the cutting off their tops immediately after they have done bearing, and then they will come again the same year about November: but they will not come just on the tops where they were cut, but out of those shoots which were, as it were, water boughs. The cause is, for that the sap, which otherwise would have fed the top, though after bearing, will, by the discharge of that, divert unto the side sprouts, and they will come to bear, but later.

414. The second is the pulling off the buds of the rose, when they are newly knotted; for then the side branches will bear. The cause is the same with the former; for cutting off the tops, and pulling off the buds, work the same effect, in retention of the sap for a time, and diversion of it to the sprouts that were not so forward.

415. The third is the cutting off some few of the top boughs in the spring time, but suffering the lower boughs to grow on. The cause is, for that the boughs do help to draw up the sap more strongly; and we see that in polling of trees, many do use to leave a bough or two on the top, to help to draw up the sap. And it is reported also, that if you graft upon the bough of a tree, and cut off some of the old boughs, the new cions will perish.

416. The fourth is by laying the roots bare about Christmas some days. The cause is plain, for that it doth arrest the sap from going upwards for a time; which arrest is afterwards released by the covering of the root again with earth; and then the sap getteth up, but later.

417. The fifth is the removing of the tree some month before it buddeth. The cause is, for that some time will be required after the remove for the re-settling, before it can draw the juice; and that time being lost, the blossom must needs come forth later.

418. The sixth is the grafting of roses in May, which commonly gardeners do not until July; and then they bear not till the next year; but if you graft them in May, they will bear the same year, but late.

419. The seventh is the girding of the body of the tree about with some packthread; for that also in a degree restraineth the sap, and maketh it come up more late and more slowly.

420. The eighth is the planting of them in a shade, or in a hedge: the cause is, partly the keeping out of the sun, which hasteneth the sap to rise; and partly the robbing of them of nourishment by the stuff in the hedge. These means may be practised upon other, both trees and flowers, "mutatis mutandis."

421. Men have entertained a conceit that showeth prettily; namely, that if you graft a late coming fruit upon a stock of a fruit tree that cometh early, the graft will bear fruit early; as a peach upon a cherry, and contrariwise, if an early-coming fruit upon a stock of a fruit tree that cometh late, the graft will bear fruit late, as a cherry upon a peach. But these are but imaginations, and untrue. The cause is, for that the cion overruleth the stock quite, and the stock is but passive only, and giveth aliment, but no motion to the graft.

Experiments in consort touching the melioration of fruits, trees, and plants.

We will speak now, how to make fruits, flowers, and roots larger, in more plenty, and sweeter than they use to be, and how to make the trees themselves more tall, more spread, and more hasty and sudden than they use to be. Wherein there is no doubt but the former experiments of acceleration will serve much to these purposes. And again, that these experiments, which we shall now set down, do serve also for acceleration, because both effects proceed from the increase of vigour in the tree; but yet, to avoid confusion, and because some of the means are more proper for the one effect, and some for the other, we will handle them apart.

422. It is an assured experience, that a heap of flint or stone, laid about the bottom of a wild tree, as an oak, elm, ash, &c., upon the first planting, doth make it prosper double as much as without it. The cause is, for that it retaineth the moisture which falleth at any time upon the tree, and suffereth it not to be exhaled by the sun. Again, it keepeth the tree warm from cold blasts and frosts, as it were in a house. It may be also, there is somewhat in the keeping of it steady at the first. Query, If laying of straw some height about the body of a tree will not make the tree forwards. For though the root giveth the sap, yet it is the body that draweth it. But you must note, that if you lay stones about a stalk of lettuce, or other plants that are more soft, it will over-moisten the roots, so as the worms will eat them.

423. A tree, at the first setting, should not be shaken, until it hath taken root fully: and therefore some have put two little forks about the bottom of their trees to keep them upright; but after a year's rooting, then shaking doth the tree good, by loosening of the earth, and, perhaps, by exercising, as it were, and stirring the sap of the tree.

424. Generally the cutting away of boughs and suckers at the root and body doth make trees grow high; and contrariwise, the polling and cutting of the top maketh them grow spread and bushy. As we see in pollards, &c.

425. It is reported, that to make hasty-growing coppice woods, the way is, to take willow, sallow, poplar, alder, of some seven years' growth; and to set them not upright, but aslope, a reasonable depth under the ground; and then, instead of one root they will put forth many, and so carry more shoots upon a stem.

426. When you would have many new roots of fruit trees, take a low tree and bow it, and lay all his branches aflat upon the ground, and cast earth upon them, and every twig will take root. And this is a very profitable experiment for costly trees, for the boughs will make stocks without charge; such as are apricots, peaches, almonds, cornelians, mulberries, figs, &c. The like is continually practised with vines, roses, musk-roses, &c.

427. From May to July you may take off the bark of any bough, being of the bigness of three or four inches, and cover the bare place, somewhat above and below, with loam well tempered with horse-dung, binding it fast down. Then cut off the bough about Allhallontide in the bare place, and set it in the ground, and it will grow to be a

fair tree in one year. The cause may be, for that the baring from the bark keepeth the sap from descending towards winter, and so holdeth it in the bough; and it may be also that the loam and horse-dung applied to the bare place do moisten it, and cherish it, and make it more apt to put forth the root. Note, that this may be a general means for keeping up the sap of trees in their boughs, which may serve to other effects.

428. It hath been practised in trees that show fair and bear not, to bore a hole through the heart of the tree, and thereupon it will bear. Which may be, for that the tree before had too much repletion, and was oppressed with its own sap; for repletion is an enemy to generation.

429. It hath been practised in trees that do not bear, to cleave two or three of the chief roots, and to put into the cleft a small pebble, which may keep it open, and then it will bear. The cause may be, for that a root of a tree may be, as it were hide-bound, no less than the body of the tree; but it will not keep open without somewhat put into it.

430. It is usually practised, to set trees that require much sun upon walls against the south; as apricots, peaches, plums, vines, figs, and the like. It hath a double commodity; the one, the heat of the wall by reflection; the other, the taking away of the shade; for when a tree groweth round, the upper boughs over-shadow the lower: but when it is spread upon a wall, the sun cometh alike upon the upper and lower branches.

431. It hath also been practised by some, to pull off some leaves from the trees so spread, that the sun may come upon the bough and fruit the better. There hath been practised also a curiosity, to set a tree upon the north side of a wall, and at a little height to draw it through the wall, and spread it upon the south side: conceiving that the root and lower part of the stock should enjoy the freshness of the shade; and the upper boughs and fruit, the comfort of the sun. But it sorted not; the cause is, for that the root requireth some comfort from the sun, though under earth, as well as the body: and the lower part of the body more than the upper, as we seen in compassing a tree below with straw.

432. The lowness of the bough where the fruit cometh, maketh the fruit greater, and to ripen better; for you shall ever see, in apricots, peaches, or melocotones upon a wall, the greatest fruits towards the bottom. And in France, the grapes that make the wine grow upon low vines bound to small stakes; and the raised vines in arbours make but verjuice. It is true, that in Italy and other countries where they have hotter sun, they raise them upon elms and trees; but I conceive, that if the French manner of planting low were brought in use there, their wines would be stronger and sweeter. But it is more chargeable in respect of the props. It were good to try whether a tree grafted somewhat near the ground and the lower boughs only maintained, and the higher continually pruned off, would not make a larger fruit.

433. To have fruit in greater plenty, the way is to graft not only upon young stocks, but upon divers boughs of an old tree; for they will bear great numbers of fruit: whereas if you graft but upon one stock the tree can bear but few.

434. The digging yearly about the roots of trees, which is a great means both to the acceleration and melioration of fruits, is practised in nothing but in vines: which if it were transferred unto other trees and shrubs, as roses, &c., I conceive would advance them likewise.

435. It hath been known, that a fruit-tree hath been blown up almost by the roots, and set up again, and the next year bear exceedingly. The cause of this was nothing but the loosening of the earth, which comforteth any tree, and is fit to be practised more than it is in fruit-trees: for trees cannot be so fitly removed into new grounds as flowers and herbs may.

436. To revive an old tree, the digging of it about the roots, and applying new mould to the roots, is the way. We see also that draught-oxen put into fresh pasture gather new and tender flesh; and in all things better nourishment than hath been used doth help to renew; especially if it be not only better, but changed and differing from the former.

437. If an herb be cut off from the roots in the beginning of winter, and then the earth be trodden and beaten down hard with the foot and spade, the roots will become of very great magnitude in summer. The reason is, for that the moisture being forbidden to come up in the plant, stayeth longer in the root, and so dilateth it. And gardeners use to tread down any loose ground after they have sown onions, or turnips, &c.

438. If "panicum" be laid below and about the bottom of a root, it will cause the root to grow to an excessive bigness. The cause is, for that being itself of a spongy substance, it draweth the moisture of the earth to it, and so feedeth the root. This is of greatest use for onions, turnips, parsnips, and carrots.

439. The shifting of ground is a means to better the tree and fruit; but with this caution, that all things do prosper best when they are advanced to the better; your nursery of stocks ought to be in a more barren ground than the ground is whereunto you remove them. So all graziers prefer their cattle from meaner pastures to better. We see also, that hardness in youth lengtheneth life, because it leaveth a cherishing to the better of the body in age: nay, in exercises, it is good to begin with the hardest, as dancing in thick shoes, &c.

440. It hath been observed, that hacking of trees in their bark, both downright and across, so

as you may make them rather in slices than in continued hacks, doth great good to trees; and especially delivereth them from being hide-bound, and killeth their moss.

441. Shade to some plants conduceth to make them large and prosperous more than sun, as in strawberries and bays, &c. Therefore amongst strawberries sow here and there some borage seed, and you shall find the strawberries under those leaves far more large than their fellows. And bays you must plant to the north, or defend them from the sun by a hedge-row; and when you sow the berries, weed not the borders for the first half year; for the weed giveth them shade.

442. To increase the crops of plants, there would be considered not only the increasing the lust of the earth, or of the plant, but the saving also of that which is spilt. So they have lately made a trial to set wheat, which nevertheless hath been left off, because of the trouble and pains: yet so much is true, that there is much saved by the setting, in comparison of that which is sown, both by keeping it from being picked up by birds, and by avoiding the shallow lying of it, whereby much that is sown taketh no root.

443. It is prescribed by some of the ancients, that you take small trees, upon which figs or other fruit grow, being yet unripe, and cover the trees in the middle of autumn with dung until the spring; and then take them up in a warm day, and replant them in good ground; and by that means the former year's tree will be ripe, as by a new birth, when other trees of the same kind do but blossom. But this seemeth to have no great probability.

444. It is reported, that if you take nitre, and mingle it with water, to the thickness of honey, and therewith anoint the bud after the vine is cut, it will sprout forth within eight days. The cause is like to be, if the experiment be true, the opening of the bud and of the parts contiguous, by the spirit of the nitre; for nitre is, as it were, the life of vegetables.

445. Take seed, or kernels of apples, pears, oranges; or a peach, or a plum-stone, &c. and put them into a squill, which is like a great onion, and they will come up much earlier than in the earth itself. This I conceive to be as a kind of grafting in the root; for as the stock of a graft yieldeth better prepared nourishment to the graft than the crude earth, so the squill doth the like to the seed. And I suppose the same would be done by putting kernels into a turnip or the like, save that the squill is more vigorous and hot. It may be tried also, with putting onion-seed into an onion-head, which thereby, perhaps, will bring forth a larger and earlier onion.

446. The pricking of a fruit in several places, when it is almost at its bigness, and before it ripeneth, hath been practised with success, to ripen the fruit more suddenly. We see the example of the biting of wasps or worms upon fruit, whereby it manifestly ripeneth the sooner.

447. It is reported, that "alga marina," seaweed, put under the roots of coleworts, and, perhaps, of other plants, will further their growth. The virtue, no doubt, hath relation to salt, which is a great help to fertility.

448. It hath been practised, to cut off the stalks of cucumbers, immediately after their bearing, close by the earth; and then to cast a pretty quantity of earth upon the plant that remaineth, and they will bear next year fruit long before the ordinary time. The cause may be, for that the sap goeth down the sooner, and is not spent in the stalk or leaf, which remaineth after the fruit. Where note, that the dying in the winter of the roots of plants that are annual, seemeth to be partly caused by the over-expense of the sap into stalk and leaves; which being prevented, they will superannuate, if they stand warm.

449. The pulling off many of the blossoms from a fruit-tree doth make the fruit fairer. The cause is manifest; for that the sap hath the less to nourish. And it is a common experience, that if you do not pull off some blossoms the first time a tree bloometh, it will blossom itself to death.

450. It were good to try what would be the effect, if all the blossoms were pulled from a fruit-tree: or the acorns and chestnut-buds, &c., from a wild tree, for two years together. I suppose that the tree will either put forth the third year bigger and more plentiful fruit: or else, the same years, larger leaves, because of the sap stored up.

451. It hath been generally received, that a plant watered with warm water will come up sooner and better than with cold water or with showers. But our experiment of watering wheat with warm water, as hath been said, succeeded not; which may be, because the trial was too late in the year, viz., in the end of October. For the cold then coming upon the seed, after it was made more tender by the warm water, might check it.

452. There is no doubt, but that grafting, for the most part doth meliorate the fruit. The cause is manifest; for that the nourishment is better prepared in the stock than in the crude earth; but yet note well, that there be some trees that are said to come up more happily from the kernel than from the graft, as the peach and melocotone. The cause, I suppose to be, for that those plants require a nourishment of great moisture; and though the nourishment of the stock be finer and better prepared, yet it is not so moist and plentiful as the nourishment of the earth. And indeed we see those fruits are very cold fruits in their nature.

453. It hath been received, that a smaller pear grafted upon a stock that beareth a greater pear, will become great. But I think it is as true as

that of the prime fruit upon the late stock; and "e converso," which we rejected before; for the cion will govern. Nevertheless, it is probable enough, that if you can get a cion to grow upon a stock of another kind, that is much moister than its own stock, it may make the fruit greater, because it will yield more plentiful nourishment, though it is like it will make the fruit baser. But generally the grafting is upon a drier stock, as the apple upon a crab, the pear upon a thorn, &c. Yet it is reported, that in the Low Countries they will graft an apple cion upon the stock of a colewort, and it will bear a great flaggy apple, the kernel of which, if it be set, will be a colewort, and not an apple. It were good to try whether an apple cion will prosper, if it be grafted upon a sallow, or upon a poplar, or upon an alder, or upon an elm, or upon a horse-plum, which are the moistest of trees. I have heard that it hath been tried upon an elm, and succeeded.

454. It is manifest by experience, that flowers removed wax greater, because the nourishment is more easily come by in the loose earth. It may be, that oft regrafting of the same cion may likewise make fruit greater; as if you take a cion and graft it upon a stock the first year, and then cut it off and graft it upon another stock the second year, and so for a third or fourth year, and then let it rest, it will yield afterward, when it beareth, the greater fruit.

Of grafting there are many experiments worth the noting, but those we reserve to a proper place.

455. It maketh figs better, if a fig-tree, when it beginneth to put forth leaves, have his top cut off. The cause is plain, for that the sap hath the less to feed, and the less way to mount: but it may be the fig will come somewhat later, as was formerly touched. The same may be tried likewise in other trees.

456. It is reported, that mulberries will be fairer, and the trees more fruitful, if you bore the trunk of the tree through in several places, and thrust into the places bored wedges of some hot trees, as turpentine, mastic-tree, guaiacum, juniper, &c. The cause may be, for that adventive heat doth cheer up the native juice of the tree.

457. It is reported, that trees will grow greater, and bear better fruit, if you put salt, or lees of wine, or blood to the root. The cause may be the increasing the lust or spirit of the root; these things being more forcible than ordinary composts.

458. It is reported by one of the ancients, that artichokes will be less prickly, and more tender, if the seeds have their tops dulled, or grated off upon a stone.

459. Herbs will be tenderer and fairer, if you take them out of beds, when they are newly come up, and remove them into pots with better earth. The remove from bed to bed was spoken of before; but that was in several years; this is upon the sudden; the cause is the same with other removes formerly mentioned.

460. Coleworts are reported by one of the ancients to prosper exceedingly, and to be better tasted, if they be sometimes watered with salt water, and much more with water mixed with nitre; the spirit of which is less adurent than salt.

461. It is reported, that cucumbers will prove more tender and dainty, if their seeds be steeped a little in milk; the cause may be, for that the seed being mollified with the milk, will be too weak to draw the grosser juice of the earth, but only the finer. The same experiment may be made in artichokes and other seeds, when you would take away either their flashiness or bitterness. They speak also, that the like effect followeth of steeping in water mixed with honey; but that seemeth to me not so probable, because honey hath too quick a spirit.

462. It is reported, that cucumbers will be less watery, and more melon-like, if in the pit where you set them, you fill it, half way up, with chaff or small sticks, and then pour earth upon them: for cucumbers, as it seemeth, do extremely affect moisture, and over-drink themselves, which the chaff or chips forbiddeth. Nay, it is farther reported, that if, when a cucumber is grown, you set a pot of water about five or six inches distance from it, it will, in twenty-four hours, shoot so much out as to touch the pot; which, if it be true, is an experiment of a higher nature than belongeth to this title: for it discovereth perception in plants, to move towards that which should help and comfort them, though it be at a distance. The ancient tradition of the vine is far more strange: it is, that if you set a stake or prop at some distance from it, it will grow that way, which is far stranger, as is said, than the other; for that water may work by a sympathy of attraction, but this of the stake seemeth to be a reasonable discourse.

463. It hath been touched before, that terebration of trees doth make then prosper better. But it is found also, that it maketh the fruit sweeter and better. The cause is, for that, notwithstanding the terebration, they may receive aliment sufficient, and yet no more than they can well turn and digest, and withal do sweat out the coarsest and unprofitablest juice; even as it is in living creatures, which by moderate feeding, and exercise, and sweat, attain the soundest habit of body.

464. As terebration doth meliorate fruit, so upon the like reason doth letting of plants blood, as pricking vines or other trees, after they be of some growth, and thereby letting forth gum or tears, though this be not to continue, as it is in terebration, but at some seasons. And it is reported that by this artifice bitter almonds have been turned into sweet.

465. The ancients, for the dulcorating of fruit, do commend swine's dung above all other dung:

which may be because of the moisture of that beast, whereby the excrement hath less acrimony, for we see swine's and pig's flesh is the moistest of fleshes.

466. It is observed by some, that all herbs wax sweeter, both in smell and taste, if after they be grown up some reasonable time they be cut, and so you take the latter sprout. The cause may be, for that the longer the juice stayeth in the root and stalk, the better it concocteth. For one of the chief causes why grains, seeds, and fruits, are more nourishing than leaves, is the length of time in which they grow to maturation. It were not amiss to keep back the sap of herbs, or the like, by some fit means, till the end of summer, whereby, it may be, they will be more nourishing.

467. As grafting doth generally advance and meliorate fruits, above that which they would be if they were set of kernels or stones, in regard the nourishment is better concocted; so, no doubt, even in grafting, for the same cause, the choice of the stock doth much always, provided that it be somewhat inferior to the cion, for otherwise it dulleth it. They commend much the grafting of pears or apples upon a quince.

468. Besides the means of melioration of fruits before mentioned, it is set down as tried, that a mixture of bran and swine's dung, or chaff and swine's dung especially, laid up together for a month to rot, is a very great nourisher and comforter to a fruit-tree.

469. It is delivered that onions wax greater if they be taken out of the earth, and laid a drying twenty days, and then set again; and yet more, if the outermost pill be taken off all over.

470. It is delivered by some, that if one take the bough of a low fruit-tree newly budded, and draw it gently, without hurting it, into an earthen pot perforate at the bottom to let in the plant, and then cover the pot with earth, it will yield a very large fruit within the ground. Which experiment is nothing but potting of plants without removing, and leaving the fruit in the earth. The like, they say, will be effected by an empty pot, without earth in it, put over the fruit, being propped up with a stake, as it hangeth upon the tree; and the better, if some few pertusions be made in the pot. Wherein, besides the defending of the fruit from extremity of sun or weather, some give a reason, that the fruit loving and coveting the open air and sun, is invited by those pertusions to spread and approach as near the open air as it can; and so enlargeth in magnitude.

471. All trees in high and sandy grounds are to be set deep, and in watery grounds more shallow. And in all trees, when they be removed, especially fruit-trees, care ought to be taken, that the sides of the trees be coasted, north and south, &c., as they stood before. The same is said also of stone out of the quarry, to make it more durable, though that seemeth to have less reason; because the stone lieth not so near the sun as the tree groweth.

472. Timber trees in a coppice wood do grow better than in an open field; both because they offer not to spread so much, but shoot up still in height; and chiefly because they are defended from too much sun and wind, which do check the growth of all fruit; and so, no doubt, fruit-trees, of vines, set upon a wall against the sun, between elbows or buttresses of stone, ripen more than upon a plain wall.

473. It is said, that if potado-roots be set in a pot filled with earth, and then the pot with earth be set likewise within the ground some two or three inches, the roots will grow greater than ordinary. The cause may be, for that having earth enough within the pot to nourish them; and then being stopped by the bottom of the pot from putting strings downward, they must needs grow greater in breadth and thickness. And it may be, that all seeds or roots potted, and so set into the earth, will prosper the better.

474. The cutting off the leaves of radish, or other roots, in the beginning of winter, before they wither, and covering again the root something high with earth, will preserve the root all winter, and make it bigger in the spring following, as hath been partly touched before. So that there is a double use of this cutting off the leaves; for in plants where the root is the esculent, as radish and parsnips, it will make the root the greater, and so it will do to the heads of onions. And where the fruit is the esculent, by strengthening the root, it will make the fruit also the greater.

475. It is an experiment of great pleasure, to make the leaves of shady trees larger than ordinary. It hath been tried for certain that a cion of a weech-elm, grafted upon the stock of an ordinary elm, will put forth leaves almost as broad as the brim of one's hat. And it is very likely, that as in fruit-trees the graft maketh a greater fruit; so in trees that bear no fruit, it will make the greater leaves. It would be tried therefore in trees of that kind chiefly, as birch, asp, willow, and especially the shining willow, which they call swallow-tail, because of the pleasure of the leaf.

476. The barrenness of trees by accident, besides the weakness of the soil, seed, or root; and the injury of the weather, cometh either of their overgrowing with moss, or their planting too deep, or by issuing of the sap too much into the leaves. For all these there are remedies mentioned before.

Experiments in consort touching compound fruits and flowers.

We see that in living creatures, that have male and female, there is copulation of several kinds; and so compound creatures, as the mule, that is generated betwixt the horse and the ass, and some other compounds which we call monsters, though

more rare; and it is held that that proverb, *Africa semper aliquid monstri parit*, cometh, for that the fountains of waters there being rare, divers sorts of beasts come from several parts to drink, and so being refreshed fall to couple, and many times with several kinds. The compounding or mixture of kinds in plants is not found out; which, nevertheless, if it be possible, is more at command than that of living creatures, for that their lust requireth a voluntary motion; wherefore it were one of the most noble experiments touching plants to find it out: for so you may have great variety of new fruits and flowers yet unknown. Grafting doth it not, that mendeth the fruit, or doubleth the flowers, &c., but it hath not the power to make a new kind. For the cion ever over-ruleth the stock.

477. It hath been set down by one of the ancients, that if you take two twigs of several fruit-trees, and flat them on the sides, and then bind them close together and set them in the ground, they will come up in one stock; but yet they will put forth their several fruits without any commixture in the fruit. Wherein note by the way, that unity of continuance is easier to procure than unity of species. It is reported also, that vines of red and white grapes being set in the ground, and the upper parts being flatted and bound close together, will put forth grapes of several colours upon the same branch; and grape-stones of several colours within the same grape: but the more after a year or two, the unity, as it seemeth, growing more perfect. And this will likewise help, if from the first uniting they be often watered, for all moisture helpeth to union. And it is prescribed also to bind the bud as soon as it cometh forth, as well as the stock, at the least for a time.

478. They report that divers seeds put into a clout, and laid in earth well dunged, will put up plants contiguous; which, afterwards being bound in, their shoots will incorporate. The like is said of kernels put into a bottle with a narrow mouth filled with earth.

479. It is reported, that young trees of several kinds set contiguous without any binding, and very often watered, in a fruitful ground, with the very luxury of the trees will incorporate and grow together. Which seemeth to me the likeliest means that hath yet been propounded; for that the binding doth hinder the natural swelling of the tree; which, while it is in motion, doth better unite.

Experiments in consort touching the sympathy and antipathy of plants.

There are many ancient and received traditions and observations touching the sympathy and antipathy of plants; for that some will thrive best growing near others, which they impute to sympathy, and some worse, which they impute to antipathy. But these are idle and ignorant conceits, and forsake the true indication of the causes, as the most part of experiments that concern sympathies and antipathies do. For as to plants neither is there any such secret friendship or hatred as they imagine: and if we should be content to call it sympathy and antipathy, it is utterly mistaken, for their sympathy is an antipathy, and their antipathy is a sympathy, for it is thus: Wheresoever one plant draweth such a particular juice out of the earth, as it qualifieth the earth, so as that juice which remaineth is fit for the other plant; there the neighbourhood doth good, because the nourishments are contrary or several; but where two plants draw much the same juice, there the neighbourhood hurteth, for the one deceiveth the other.

480. First, therefore, all plants that do draw much nourishment from the earth, and so soak the earth and exhaust it, hurt all things that grow by them; as great trees, especially ashes, and such trees as spread their roots near the top of the ground. So the colewort is not an enemy, though that were anciently received, to the vine only; but it is an enemy to any other plant, because it draweth strongly the fattest juice of the earth. And if it be true, that the vine, when it creepeth near the colewort will turn away, this may be, because there it findeth worse nourishment; for though the root be where it was, yet, I doubt, the plant will bend as it nourisheth.

481. Where plants are of several natures, and draw several juices out of the earth, there, as hath been said, the one set by the other helpeth: as it is set down by divers of the ancients, that rue doth prosper much, and becometh stronger, if it be set by a fig-tree, which, we conceive, is caused not by reason of friendship, but by extraction of a contrary juice; the one drawing juice fit to result sweet, the other bitter. So they have set down likewise, that a rose set by garlic is sweeter: which likewise may be, because the more fetid juice of the earth goeth into the garlic, and the more odorate into the rose.

482. This we see manifestly, that there be certain corn-flowers which come seldom or never in other places, unless they be set, but only amongst corn: as the blue-bottle, a kind of yellow marygold, wild poppy, and fumitory. Neither can this be, by reason of the culture of the ground, by ploughing or furrowing; as some herbs and flowers will grow but in ditches new cast; for if the ground lie fallow and unsown, they will not come: so as it should seem to be the corn that qualifieth the earth, and prepareth it for their growth.

483. This observation, if it holdeth, as it is very probable, is of great use for the meliorating of taste in fruits and esculent herbs, and of the scent of flowers. For I do not doubt, but if the fig-tree do make the rue more strong and bitter, as the ancients have noted, good store of rue planted about the fig-tree will make the fig more

sweet. Now the tastes that do most offend in fruits, and herbs, and roots, are bitter, harsh, sour, and waterish, or flabby. It were good, therefore, to make the trials following.

484. Take wormwood, or rue, and set it near lettuce, or coleflory, or artichoke, and see whether the lettuce, or the coleflory, &c., become not the sweeter.

485. Take a service-tree, or a cornelian-tree, or an elder-tree, which we know have fruits of harsh and binding juice, and set them near a vine, or fig-tree, and see whether the grapes or figs will not be the sweeter.

486. Take cucumbers or pumpions, and set them here and there, amongst musk-mellons, and see whether the melons will not be more winy, and better tasted. Set cucumbers, likewise, amongst radish, and see whether the radish will not be made the more biting.

487. Take sorrel, and set it amongst rasps, and see whether the rasps will not be the sweeter.

488. Take common brier, and set it amongst violets or wall-flowers, and see whether it will not make the violets or wall-flowers sweeter, and less earthy in their smell. So set lettuce or cucumbers amongst rosemary or bays, and see whether the rosemary or bays will not be the more odorate or aromatical.

489. Contrariwise, you must take heed how you set herbs together that draw much the like juice. And therefore I think rosemary will lose in sweetness, if it be set with lavender, or bays, or the like. But yet if you will correct the strength of an herb, you shall do well to set other like herbs by him to take him down; as if you should set tansey by angelica, it may be the angelica would be the weaker, and fitter for mixture in perfume. And if you should set rue by common wormwood, it may be the wormwood would turn to be liker Roman wormwood.

490. This axiom is of large extent; and therefore would be severed, and refined by trial. Neither must you expect to have a gross difference by this kind of culture, but only farther perfection.

491. Trial would be also made in herbs poisonous and purgative, whose ill quality, perhaps, may be discharged, or attempered, by setting stronger poisons or purgatives by them.

492. It is reported, that the shrub called our ladies seal, which is a kind of briony, and coleworts, set near together, one or both will die. The cause is, for that they be both great depredators of the earth, and one of them starveth the other. The like is said of a reed and a brake; both of which are succulent, and therefore the one deceiveth the other. And the like of hemlock and rue; both which draw strong juices.

493. Some of the ancients, and likewise divers of the modern writers that have laboured in natural magic, have noted a sympathy between the sun, moon, and some principal stars, and certain herbs and plants. And so they have denominated some herbs solar, and some lunar; and such like toys put into great words. It is manifest that there are some flowers that have respect to the sun in two kinds, the one by opening and shutting, and the other by bowing and inclining the head. For marygolds, tulips, pimpernel, and indeed most flowers, do open and spread their leaves abroad when the sun shineth serene and fair: and again, in some part, close them, or gather them inward, either towards night, or when the sky is overcast. Of this there needeth no such solemn reason to be assigned, as to say, that they rejoice at the presence of the sun, and mourn at the absence thereof. For it is nothing else but a little loading of the leaves, and swelling them at the bottom, with the moisture of the air, whereas the dry air doth extend them; and they make it a piece of the wonder, that garden clover will hide the stalk when the sun showeth bright, which is nothing but a full expansion of the leaves. For the bowing and inclining the head, it is found in the great flower of the sun, in marygolds, wart-wort, mallow flowers, and others. The cause is somewhat more obscure than the former; but I take it to be no other, but that the part against which the sun beateth, waxeth more faint and flaccid in the stalk, and thereby less able to support the flower.

494. What a little moisture will do in vegetables, even though they be dead and severed from the earth, appeareth well in the experiment of jugglers. They take the beard of an oat, which, if you mark it well, is wreathed at the bottom, and one smooth entire straw at the top. They take only the part that is wreathed, and cut off the other, leaving the beard half the breadth of a finger in length. Then they make a little cross of a quill, longways of that part of the quill which hath the pith; and cross-ways of that piece of the quill without pith; the whole cross being the breadth of a finger high. Then they prick the bottom where the pith is, and thereinto they put the oaten beard, leaving half of it sticking forth of the quill: then they take a little white box of wood, to deceive men, as if somewhat in the box did work the feat, in which, with a pin, they make a little hole, enough to take the beard, but not to let the cross sink down, but to stick. Then likewise, by way of imposture, they make a question; as, Who is the fairest woman in the company? or, Who hath a glove or a card? and cause another to name divers persons; and upon every naming they stick the cross in the box, having first put it towards their mouth, as if they charmed it, and the cross stirreth not; but when they come to the person that they would take, as they hold the cross to their mouth, they touch the beard with the tip of their tongue and wet it, and so stick the cross in the box; and then

you shall see it turn finely and softly three or four turns, which is caused by the untwining of the beard by the moisture. You may see it more evidently, if you stick the cross between your fingers instead of the box; and therefore you may see, that this motion, which is effected by so little wet, is stronger than the closing or bending of the head of a marygold.

495. It is reported by some, that the herb called "rosa solis," whereof they make strong waters, will, at the noon-day, when the sun shineth hot and bright, have a great dew upon it. And therefore that the right name is "ros solis," which they impute to a delight and sympathy that it hath with the sun. Men favour wonders. It were good first to be sure, that the dew that is found upon it be not the dew of the morning preserved, when the dew of other herbs is breathed away; for it hath a smooth and thick leaf, that doth not discharge the dew so soon as other herbs that are more spongy and porous. And it may be purslane, or some other herb, doth the like, and is not marked. But if it be so, that it hath more dew at noon than in the morning, then sure it seemeth to be an exudiation of the herb itself. As plums sweat when they are set in the oven: for you will not, I hope, think, that it is like Gideon's fleece of wool, that the dew should fall upon that and nowhere else.

496. It is certain, that the honey dews are found more upon oak leaves than upon ash, or beech, or the like: but whether any cause be from the leaf itself to concoct the dew, or whether it be only that the leaf is close and smooth, and therefore drinketh not in the dew, but preserveth it, may be doubted. It would be well inquired, whether manna, the drug, doth fall but upon certain herbs or leaves only. Flowers that have deep sockets, do gather in the bottom a kind of honey, as honey-suckles, both the woodbine and the trefoil, lilies, and the like. And in them certainly the flower beareth part with the dew.

497. The experience is, that the froth which they call woodseare, being like a kind of spittle, is found but upon certain herbs, and those hot ones: as lavender, lavender cotton, sage, hyssop, &c. Of the cause of this inquire further: for it seemeth a secret. There falleth also mildew upon corn, and smutteth it; but it may be, that the same falleth also upon other herbs and is not observed.

498. It were good trial were made, whether the great consent between plants and water, which is a principal nourishment of them, will make an attraction at a distance and not at touch only. Therefore take a vessel, and in the middle of it make a false bottom of a coarse canvass: fill it with earth above the canvass, and let not the earth be watered; then sow some good seeds in that earth; but under the canvass, some half a foot in the bottom of the vessel, lay a great sponge, thoroughly wet in water; and let it lie so some ten days, and see whether the seeds will sprout, and the earth become more moist, and the sponge more dry. The experiment formerly mentioned of the cucumber creeping to the pot of water is far stranger than this.

Experiments in consort touching the making herbs and fruits medicinable.

499. The altering of the scent, colour, or taste of fruit, by infusing, mixing, or letting into the bark, or root of the tree, herb, or flower, any coloured, aromatical, or medicinal substances, are but fancies. The cause is, for that those things have passed their period, and nourish not. And all alteration of vegetables in those qualities must be by somewhat that is apt to go into the nourishment of the plant. But this is true, that where kine feed upon wild garlic, their milk tasteth plainly of the garlic: and the flesh of muttons is better tasted where the sheep feedeth upon wild thyme, and other wholesome herbs. Galen also speaketh of the curing of the "scirrus" of the liver, by milk of a cow that feedeth but upon certain herbs; and honey in Spain smelleth apparently of the rosemary, or orange, from whence the bee gathereth it: and there is an old tradition of a maiden that was fed with "napellus;" which is counted the strongest poison of all vegetables, which with use did not hurt the maid, but poisoned some that had carnal company with her. So it is observed by some, that there is a virtuous bezoar, and another without virtue, which appear to the show alike: but the virtuous is taken from the beast that feedeth upon the mountains, where there are theriacal herbs, and that without virtue, from those that feed in the valleys where no such herbs are. Thus far I am of opinion; that as steeped wines and beers are very medicinal; and likewise bread tempered with divers powders; so of meat also, as flesh, fish, milk and eggs, that they may be made of great use for medicine and diet, if the beasts, fowl, or fish, be fed with a special kind of food fit for the disease. It were a dangerous thing also for secret empoisonments. But whether it may be applied unto plants and herbs, I doubt more, because the nourishment of them is a more common juice; which is hardly capable of any special quality, until the plant do assimilate it.

500. But lest our incredulity may prejudice any profitable operations in this kind, especially since many of the ancients have set them down, we think good briefly to propound the four means which they have devised of making plants medicinable. The first is, by slitting of the root, and infusing into it the medicine; as hellebore, opium, scammony, treacle, &c., and then binding it up again. This seemeth to me the least probable; because the root draweth immediately from the earth; and so the nourishment is the more common

and less qualified: and besides, it is a long time in going up ere it come to the fruit. The second way is to perforate the body of the tree, and there to infuse the medicine; which is somewhat better: for if any virtue be received from the medicine, it hath the less way, and the less time to go up. The third is, the steeping of the seed or kernel in some liquor wherein the medicine is infused: which I have little opinion of, because the seed, I doubt, will not draw the parts of the matter which have the propriety; but it will be far the more likely, if you mingle the medicine with dung; for that the seed naturally drawing the moisture of the dung, may call in withal some of the propriety. The fourth is, the watering of the plant oft with an infusion of the medicine. This, in one respect, may have more force than the rest, because the medication is oft renewed; whereas the rest are applied but at one time; and therefore the virtue may the sooner vanish. But still I doubt, that the root is somewhat too stubborn to receive those fine impressions; and besides, as I said before, they have a great hill to go up. I judge therefore the likeliest way to be the perforation of the body of the tree in several places one above the other; and the filling of the holes with dung mingled with the medicine; and the watering of those lumps of dung with squirts of an infusion of the medicine in dunged water, once in three or four days.

CENTURY VI.

Experiments in consort touching curiosities about fruits and plants.

OUR experiments we take care to be, as we have often said, either "experimenta fructifera," or "lucifera;" either of use, or of discovery: for we hate impostures, and despise curiosities. Yet because we must apply ourselves somewhat to others, we will set down some curiosities touching plants.

501. It is a curiosity to have several fruits upon one tree; and the more, when some of them come early, and some come late, so that you may have upon the same tree ripe fruits all summer. This is easily done by grafting of several cions upon several boughs of a stock, in a good ground plentifully fed. So you may have all kinds of cherries, and all kinds of plums, and peaches, and apricots, upon one tree; but I conceive the diversity of fruits must be such as will graft upon the same stock. And, therefore, I doubt, whether you can have apples, or pears, or oranges, upon the same stock upon which you graft plums.

502. It is a curiosity to have fruits of divers shapes and figures. This is easily performed, by moulding them when the fruit is young, with moulds of earth or wood. So you may have cucumbers, &c., as long as a cane or as round as a sphere; or formed like a cross. You may have also apples in the form of pears or lemons. You may have also fruit in more accurate figures, as we said of men, beasts, or birds, according as you make the moulds. Wherein you must understand, that you make the mould big enough to contain the whole fruit when it is grown to the greatest: for else you will choke the spreading of the fruit; which otherwise would spread itself, and fill the concave, and so be turned into the shape desired; as it is in mould works of liquid things. Some doubt may be conceived, that the keeping of the sun from the fruit may hurt it: but there is ordinary experience of fruit that groweth covered. Query, also, whether some small holes may not be made in the wood to let in the sun. And note, that it were best to make the moulds partible, glued or cemented together that you may open them when you take out the fruit.

503. It is a curiosity to have inscriptions, or engravings, in fruit or trees. This is easily performed, by writing with a needle, or bodkin, or knife, or the like, when the fruit or trees are young; for as they grow, so the letters will grow more large and graphical,

—Teneriaque meos incidere amores
Arboribus! crescent illæ, crescetis amores.

504. You may have trees apparelled with flowers or herbs, by boring holes in the bodies of them, and putting into them earth holpen with muck, and setting seeds or slips of violets, strawberries, wild thyme, camomile, and such like, in the earth. Wherein they do but grow in the tree, as they do in pots: though, perhaps, with some feeding from the trees. It would be tried also with shoots of vines, and roots of red roses; for it may be they being of a more ligneus nature, will incorporate with the tree itself.

505. It is an ordinary curiosity to form trees and shrubs, as rosemary, juniper, and the like, into sundry shapes; which is done by moulding them within, and cutting them without. But they are but lame things, being too small to keep figure; great castles made of trees upon frames of timber, with turrets and arches, were anciently matters of magnificence.

506. Amongst curiosities I shall place coloration, though it be somewhat better; for beauty in flowers is their pre-eminence. It is observed by some, that gillyflowers, sweetwilliams, violets, that are coloured, if they be neglected, and neither watered, nor new moulded, nor transplanted, will

turn white. And it is probable, that the white with much culture may turn coloured. For this is certain, that the white colour cometh of scarcity of nourishment; except in flowers that are only white, and admit no other colours.

507. It is good, therefore, to see what natures do accompany what colours; for by that you shall have light how to induce colours, by producing those natures. Whites are more inodorate, for the most part, than flowers of the same kind coloured; as is found in single white violets, white roses, white gillyflowers, white stock-gillyflowers, &c. We find also that blossoms of trees, that are white, are commonly inodorate, as cherries, pears, plums; whereas those of apples, crabs, almonds, and peaches, are blushy, and smell sweet. The cause is, for that the substance that maketh the flower is of the thinnest and finest of the plant, which also maketh flowers to be of so dainty colours. And if it be too sparing and thin, it attaineth no strength of odour, except it be in such plants as are very succulent; whereby they need rather to be scanted in their nourishment than replenished, to have them sweet. As we see in white satyrion, which is of a dainty smell; and in bean-flowers, &c. And again, if the plant be of nature to put forth white flowers only, and those not thin or dry, they are commonly of rank and fulsome smell; as may-flowers, and white lilies.

508. Contrariwise, in berries, the white is commonly more delicate and sweet in taste than the coloured, as we see in white grapes, in white rasps, in white strawberries, in white currants, &c. The cause is, for that the coloured are more juiced, and coarser juiced, and therefore not so well and equally concocted; but the white are better proportioned to the digestion of the plant.

509. But in fruits the white commonly is meaner: as in pear-plums, damascenes, &c., and the choicest plums are black; the mulberry, which, though they call it a berry, is a fruit, is better the black than the white. The harvest white plum is a base plum; and the verdoccio, and white date-plum are no very good plums. The cause is, for that they are all over-watery; whereas a higher concoction is required for sweetness, or pleasure of taste; and therefore all your dainty plums are a little dry, and come from the stone; as the muscle-plum, the damascene-plum, the peach, the apricot, &c., yet some fruits, which grow not to be black, are of the nature of berries, sweetest such as are paler; as the cœur-cherry, which inclineth more to white, is sweeter than the red; but the egriot is more sour.

510. Take gillyflower seed, of one kind of gillyflower, as of the clove-gillyflower, which is the most common, and sow it, and there will come up gillyflowers some of one colour, and some of another, casually, as the seed meeteth with nourishment in the earth; so that the gardeners find, that they may have two or three roots amongst a hundred that are rare and of great price; as purple, carnation of several stripes: the cause is, no doubt, that in earth, though it be contiguous, and in one bed, there are very several juices; and as the seed doth casually meet with them, so it cometh forth. And it is noted especially, that those which do come up purple, do always come up single: the juice, as it seemeth, not being able to suffice a succulent colour, and a double leaf. This experiment of several colours coming up from one seed, would be tried also in larks-foot, monks-hood, poppy, and holyoak.

511. Few fruits are coloured red within: the queen-apple is; and another apple, called the rose-apple: mulberries, likewise, and grapes, though most towards the skin. There is a peach also that hath a circle of red towards the stone: and the egriot cherry is somewhat red within; but no pear, nor warden, nor plum, nor apricot, although they have many times red sides, are coloured red within. The cause may be inquired.

512. The general colour of plants is green, which is a colour that no flower is of. There is a greenish primrose, but it is pale and scarce a green. The leaves of some trees turn a little murry or reddish, and they be commonly young leaves that do so; as it is in oaks, and vines, and hazel. Leaves rot into a yellow, and some hollies have part of their leaves yellow, that are, to all seeming, as fresh and shining as the green. I suppose also, that yellow is a less succulent colour than green, and a degree nearer white. For it hath been noted, that those yellow leaves of holly stand ever towards the north or north-east. Some roots are yellow, as carrots; and some plants blood-red, stalk and leaf, and all, as amaranthus. Some herbs incline to purple and red; as a kind of sage doth, and a kind of mint, and rosa solis, &c. And some have white leaves, as another kind of sage, and another kind of mint; but azure and a fair purple are never found in leaves. This showeth, that flowers are made of a refined juice of the earth, and so are fruits; but leaves of a more coarse and common.

513. It is a curiosity also to make flowers double, which is effected by often removing them into new earth: as on the contrary part, double flowers, by neglecting and not removing, prove single. And the way to do it speedily, is to sow or set seeds or slips of flowers; and as soon as they come up, to remove them into new ground that is good. Inquire also, whether inoculating of flowers, as stockgillyflowers, roses, musk-roses, &c. doth not make them double. There is a cherry-tree that hath double blossoms; but that tree beareth no fruit: and it may be, that the same means which, applied to the tree, doth extremely accelerate the sap to rise and break forth, would make the tree spend itself in flowers, and those to become double: which were a great

pleasure to see, especially in apple-trees, peach-trees, and almond-trees, that have blossoms blush-coloured.

514. The making of fruits without core or stone, is likewise a curiosity, and somewhat better; because whatsoever maketh them so, is like to make them more tender and delicate. If a cion or shoot, fit to be set in the ground, have the pith finely taken forth, and not altogether, but some of it left, the better to save the life, it will bear a fruit with little or no core or stone. And the like is said to be of dividing a quick tree down to the ground, and taking out the pith, and then binding it up again.

515. It is reported also, that a citron grafted upon a quince will have small or no seeds: and it is very probable that any sour fruit grafted upon a stock that beareth a sweeter fruit, may both make the fruit sweeter, and more void of the harsh matter of kernels or seeds.

516. It is reported, that not only the taking out of the pith, but the stopping of the juice of the pith from rising in the midst, and turning it to rise on the outside, will make the fruit without core or stone: as if you should bore a tree clean through, and put a wedge in. It is true, there is some affinity between the pith and the kernel, because they are both of a harsh substance, and both placed in the midst.

517. It is reported, that trees watered perpetually with warm water, will make a fruit with little or no core or stone. And the rule is general, that whatsoever will make a wild tree a garden tree, will make a garden tree to have less core or stone.

Experiments in consort touching the degenerating of plants, and of the transmutation of them into one another.

518. The rule is certain, that plants for want of culture degenerate to be baser in the same kind; and sometimes so far as to change into another kind, 1. The standing long, and not being removed, maketh them degenerate. 2. Drought, unless the earth of itself be moist, doth the like. 3. So doth removing into worse earth, or forbearing to compost the earth; as we see that water-mint turneth into field-mint, and the colewort into rape, by neglect, &c.

519. Whatsoever fruit useth to be set upon a root or a slip, if it be sown, will degenerate. Grapes sown, figs, almonds, pomegranate kernels sown, make the fruits degenerate and become wild. And again, most of those fruits that use to be grafted, if they be set of kernels, or stones, degenerate. It is true that peaches, as hath been touched before, do better upon stones set than upon grafting; and the rule of exception should seem to be this: that whatsoever plant requireth much moisture, prospereth better upon the stone or kernel than upon the graft. For the stock, though it giveth a finer nourishment, yet it giveth a scanter than the earth at large.

520. Seeds, if they be very old, and yet have strength enough to bring forth a plant, make the plant degenerate. And therefore skilful gardeners make trial of the seeds before they buy them, whether they be good or no, by putting them into water gently boiled; and if they be good, they will sprout within half an hour.

521. It is strange which is reported, that basil, too much exposed to the sun doth turn into wild thyme; although those two herbs seem to have small affinity; but basil is almost the only hot herb that hath fat and succulent leaves, which oiliness, if it be drawn forth by the sun, it is like it will make a very great change.

522. There is an old tradition, that boughs of oak put into the earth will put forth wild vines: which, if it be true, no doubt it is not the oak that turneth into a vine, but the oak-bough putrefying, qualifieth the earth to put forth a vine of itself.

523. It is not impossible, and I have heard it verified, that upon cutting down of an old timber tree, the stub hath put out sometimes a tree of another kind; as the beech hath put forth birch; which, if it be true, the cause may be, for that the old stub is too scant of juice to put forth the former tree; and therefore putteth forth a tree of a smaller kind, that needeth less nourishment.

524. There is an opinion in the country, that if the same ground be oft sown with the grain that grew upon it, it will in the end grow to be of a baser kind.

525. It is certain, that in very sterile years corn sown will grow to another kind.

"Grandia sæpe quibus mandavimus hordea sulci
Infelix lolium, et steriles dominantur avenæ."

And generally it is a rule, that plants that are brought forth by culture, as corn, will sooner change into other species than those that come of themselves; for that culture giveth but an adventitious nature, which is more easily put off.

This work of the transmutation of plants one into another, is "inter magnalia naturæ:" for the transmutation of species is, in the vulgar philosophy, pronounced impossible, and certainly it is a thing of difficulty, and requireth deep search into nature; but seeing there appear some manifest instances of it, the opinion of impossibility is to be rejected, and the means thereof to be found out. We see, that in living creatures, that come of putrefaction, there is much transmutation of one into another, as caterpillars turn into flies, &c. And it should seem probable, that whatsoever creature, having life, is generated without seed, that creature will change out of one species into another. For it is the seed, and the nature of it, which locketh and boundeth in the creature, that it doth not expatiate. So as we may well conclude, that seeing the earth of itself doth put forth plants without seed, therefore plants may

well have a transmigration of species. Wherefore, wanting instances which do occur, we shall give directions of the most likely trials; and generally we would not have those that read this work of "Sylva Sylvarum" account it strange, or think that it is an over-haste, that we have set down particulars untried: for contrariwise, in our own estimation, we account such particulars more worthy than those that are already tried and known; for these latter must be taken as you find them; but the other do level point-blank at the inventing of causes and axioms.

526. First, therefore, you must make account, that if you will have one plant change into another, you must have the nourishment over-rule the seed; and therefore you are to practise it by nourishment as contrary as may be to the nature of the herb, so nevertheless as the herb may grow, and likewise with seeds that are of the weakest sort, and have least vigour. You shall do well, therefore, to take marsh-herbs, and plant them on tops of hills and champaigns; and such plants as require much moisture upon sandy and very dry grounds. As for example, marsh-mallows and sedge, upon hills; cucumber, and lettuce seeds, and coleworts, upon a sandy plot; so contrariwise, plant bushes, heathling, and brakes, upon a wet or marsh ground. This, I conceive also, that all esculent and garden herbs, set upon the tops of hills, will prove more medicinal, though less esculent than they were before. And it may be likewise, some wild herbs you may make salad herbs. This is the first rule for transmutation of plants.

527. The second rule shall be, to bury some few seeds of the herbs you would change, amongst other seeds; and then you shall see whether the juice of those other seeds do not so qualify the earth, as it will alter the seed whereupon you work. As for example, put parsley seed amongst onion seed, or lettuce seed amongst parsley seed, or basil seed amongst thyme seed; and see the change of taste or otherwise. But you shall do well to put the seed you would change into a little linen cloth, that it mingle not with the foreign seed.

528. The third rule shall be, the making of some medley or mixture of earth with some other plants bruised or shaven either in leaf or root; as for example, make earth with a mixture of colewort leaves stamped, and set in it artichokes or parsnips; so take earth made with marjoram, or origanum, or wild thyme, bruised or stamped, and set in it fennel seed, &c. In which operation the process of nature still will be, as I conceive, not that the herb you work upon should draw the juice of the foreign herb, for that opinion we have formerly rejected, but there will be a new confection of mould, which perhaps will alter the seed, and yet not to the kind of the former herb.

529. The fourth rule shall be, to mark what herbs some earths do put forth of themselves, and to take that earth and to pot it, or vessel it: and in that to set the seed you would change: as, for example, take from under walls or the like, where nettles put forth in abundance, the earth, which you shall there find, without any string or root of the nettles: and pot that earth, and set in it stock-gillyflowers, or wallflowers, &c., or sow in the seeds of them, and see what the event will be; or take earth that you have prepared to put forth mushrooms of itself, whereof you shall find some instances following, and sow in it purslane seed, or lettuce seed; for in these experiments, it is likely enough that the earth being accustomed to send forth one kind of nourishment, will alter the new seed.

530. The fifth rule shall be, to make the herb grow contrary to its nature; as to make ground-herbs rise in height: as, for example, carry camomile, or wild thyme, or the green strawberry upon sticks, as you do hops upon poles, and see what the event will be.

531. The sixth rule shall be, to make plants grow out of the sun or open air; for that is a great mutation in nature, and may induce a change in the seed; as barrel up earth and sow some seed in it, and put it in the bottom of a pond, or put it in some great hollow tree: try also the sowing of seeds in the bottoms of caves; and pots with seeds sown, hanged up in wells some distance from the water, and see what the event will be.

Experiments in consort touching the procevity, and lowness, and artificial dwarfing of trees.

532. It is certain, that timber trees in coppice woods grow more upright and more free from under-boughs, than those that stand in the fields: the cause whereof is, for that plants have a natural motion to get to the sun; and besides, they are not glutted with too much nourishment; for that the coppice shareth with them, and repletion ever hindereth stature: lastly they are kept warm, and that ever in plants helpeth mounting.

533. Trees that are of themselves full of heat, which heat appeareth by their inflammable gums, as firs, and pines, mount of themselves in height without side-boughs, till they come towards the top. The cause is partly heat, and partly tenuity of juice, both which send the sap upwards. As for juniper, it is but a shrub, and groweth not big enough in body to maintain a tall tree.

534. It is reported that a good strong canvass, spread over a tree grafted low, soon after it putteth forth, will dwarf it and make it spread. The cause is plain; for that all things that grow, will grow as they find room.

535. Trees are generally set of roots or kernels: but if you set them of slips, as of some trees you may, by name the mulberry, some of the slips will take; and those that take, as is reported, will be

dwarf trees. The cause is, for that a slip draweth nourishment more weakly than either a root or kernel.

536. All plants that put forth their sap hastily have their bodies not proportionable to their length, and therefore they are winders and creepers; as ivy, briony, hops, woodbine; whereas dwarfing requireth a slow putting forth, and less vigour of mounting.

Experiments in consort touching the rudiments of plants, and of the excrescences of plants, or superplants.

The Scripture saith, that Solomon wrote a Natural History, "from the cedar of Libanus, to the moss growing upon the wall;" for so the best translations have it. And it is true that moss is but the rudiment of a plant; and, as it were, the mould of earth or bark.

537. Moss groweth chiefly upon ridges of houses tiled or thatched, and upon the crests of walls; and that moss is of a lightsome and pleasant green. The growing upon slopes is caused, for that moss, as on the one side it cometh of moisture and water, so on the other side the water must but slide, and not stand or pool. And the growing upon tiles, or walls, &c., is caused for that those dried earths, having not moisture sufficient to put forth a plant, do practise germination by putting forth moss; though when, by age, or otherwise, they grow to relent and resolve, they sometimes put forth plants, as wall-flowers. And almost all moss hath here and there little stalks, besides the low thrum.

538. Moss groweth upon alleys, especially such as lie cold and upon the north; as in divers terraces: and again, if they be much trodden; or if they were at the first gravelled; for wheresoever plants are kept down, the earth putteth forth moss.

539. Old ground, that hath been long unbroken up, gathereth moss; and therefore husbandmen use to cure their pasture grounds when they grow to moss, by tilling them for a year or two: which also dependeth upon the same cause; for that the more sparing and starving juice of the earth, insufficient for plants, doth breed moss.

540. Old trees are more mossy far than young; for that the sap is not so frank as to rise all to the boughs, but tireth by the way, and putteth out moss.

541. Fountains have moss growing upon the ground about them:—

"Muscosi fontes."

The cause is, for that the fountains drain the water from the ground adjacent, and leave but sufficient moisture to breed moss: and besides, the coldness of the water conduceth to the same.

542. The moss of trees is a kind of hair; for it is the juice of the tree that is excerned, and doth not assimilate. And upon great trees the moss gathereth a figure like a leaf.

543. The moister sort of trees yield but little moss, as we see in asps, poplars, willows, beeches, &c., which is partly caused for the reason that hath been given, of the frank putting up of the sap into the boughs; and partly for that the barks of those trees are more close and smooth than those of oaks and ashes; whereby the moss can the hardlier issue out.

544. In clay-grounds all fruit-trees grow full of moss both upon body and boughs, which is caused partly by the coldness of the ground, whereby the plants nourish less, and partly by the roughness of the earth, whereby the sap is shut in, and cannot get up to spread so frankly as it should do.

545. We have said heretofore, that if trees be hide-bound, they wax less fruitful, and gather moss; and that they are holpen by hacking, &c. And therefore by the reason of contraries, if trees be bound in with cords, or some outward bands, they will put forth more moss; which, I think, happeneth to trees that stand bleak, and upon the cold winds. It would also be tried, whether, if you cover a tree somewhat thick upon the top after his polling it will not gather more moss. I think also the watering of trees with cold fountain-water will make them grow full of moss.

546. There is a moss the perfumers have, which cometh out of apple trees, that hath an excellent scent. Query, particularly for the manner of the growth, and the nature of it. And for this experiment's sake, being a thing of price, I have set down the last experiments how to multiply and call on mosses.

Next unto moss, I will speak of mushrooms; which are likewise an imperfect plant. The mushrooms have two strange properties; the one, that they yield so delicious a meat; the other, that they come up so hastily, as in a night; and yet they are unsown. And therefore such as are upstarts in state they call in reproach mushrooms. It must needs be, therefore, that they be made of much moisture; and that moisture fat, gross, and yet somewhat concocted. And, indeed, we find that mushrooms cause the accident which we call "incubus" or the mare in the stomach. And therefore the surfeit of them may suffocate and empoison. And this showeth that they are windy; and that windiness is gross and swelling, not sharp or griping. And upon the same reason mushrooms are a venerous meat.

547. It is reported, that the bark of white or red poplar, which are of the moistest of trees, cut small, and cast into furrows well dunged, will cause the ground to put forth mushrooms at all seasons of the year fit to be eaten. Some add to the mixture leaven of bread dissolved in water.

548. It is reported, that if a hilly field, where the stubble is standing, be set on fire in the showery season, it will put forth great store of mushrooms.

549. It is reported, that hartshorn, shaven, or in small pieces, mixed with dung and watered, putteth up mushrooms. And we know that hartshorn is of a fat and clammy substance: and it may be ox-horn would do the like.

550. It hath been reported, though it be scarce credible, that ivy hath grown out of a stag's horn; which they suppose did rather come from a confrication of the horn upon the ivy, than from the horn itself. There is not known any substance but earth, and procedures of earth, as tile, stone, &c., that yieldeth any moss or herby substance. There may be trial made of some seeds, as that of fennel-seed, mustard-seeds, and rape-seeds, put into some little holes made in the horns of stags, or oxen, to see if they will grow.

551. There is also another imperfect plant, that in show is like a great mushroom: and it is sometimes as broad as one's hat; which they call a toad's stool; but it is not esculent; and it groweth, commonly, by a dead stub of a tree, and likewise about the roots of rotten trees: and therefore seemeth to take his juice from wood putrefied. Which showeth, by the way, that wood putrefied yieldeth a frank moisture.

552. There is a cake that groweth upon the side of a dead tree, that hath gotten no name, but it is large, and of a chestnut colour, and hard and pithy; whereby it should seem, that even dead trees forget not their putting forth: no more than the carcasses of men's bodies, that put forth hair and nails for a time.

553. There is a cod, or bag, that groweth commonly in the fields; that at the first is hard like a tennis-ball, and white; and after groweth of a mushroom colour, and full of light dust upon the breaking, and is thought to be dangerous for the eyes if the powder get into them, and to be good for kibes. Belike it hath a corrosive and fretting nature.

554. There is an herb called Jew's ear, that groweth upon the roots and lower parts of the bodies of trees; especially of elders, and sometimes ashes. It hath a strange property; for in warm water it swelleth, and openeth extremely. It is not green, but of dusky brown colour. And it is used for squinancies and inflammations in the throat; whereby it seemeth to have a mollifying and lenifying virtue.

555. There is a kind of spungy excrescence, which groweth chiefly upon the roots of the laser-tree; and sometimes upon cedar and other trees. It is very white, and light, and friable; which we call agaric. It is famous in physic for the purging of tough phlegm. And it is also an excellent opener for the liver; but offensive to the stomach: and in taste, it is at the first sweet, and after bitter.

556. We find no super-plant that is a formed plant, but misseltoe. They have an idle tradition, that there is a bird called a misselbird, that feedeth upon a seed, which many times she cannot digest, and so expelleth it whole with her excrement: which falling upon a bough of a tree that hath some rift, putteth forth the misseltoe. But this is a fable, for it is not probable that birds should feed upon that they cannot digest. But allow that, yet it cannot be for other reasons; for first, it is found but upon certain trees; and those trees bear no such fruit, as may allure that bird to sit and feed upon them. It may be, that bird feedeth upon the misseltoe-berries, and so is often found there; which may have given occasion to the tale. But that which maketh an end of the question is, that misseltoe hath been found to put forth under the boughs, and not only above the boughs; so it cannot be any thing that falleth upon the bough. Misseltoe groweth chiefly upon crab-trees, apple-trees, sometimes upon hazles, and rarely upon oaks: the misseltoe whereof is counted very medicinal. It is ever green winter and summer, and beareth a white glistering berry: and it is a plant utterly differing from the plant upon which it groweth. Two things therefore may be certainly set down: first, that superfœtation must be by abundance of sap in the bough that putteth it forth: secondly, that that sap must be such as the tree doth excern, and cannot assimilate; for else it would go into a bough, and besides, it seemeth to be more fat and unctuous than the ordinary sap of the tree; both by the berry, which is clammy; and by that it continueth green winter and summer, which the tree doth not.

557. This experiment of misseltoe may give light to other practices. Therefore trial would be made by ripping of the bough of a crab-tree in the bark, and watering of the wound every day with warm water dunged, to see if it would bring forth misseltoe, or any such like thing. But it were yet more likely to try it with some other watering or anointing, that were not so natural to the tree as water is; as oil, or barm of drink, &c., so they be such things as kill not the bough.

558. It were good to try, what plants would put forth, if they be forbidden to put forth their natural boughs; poll therefore a tree, and cover it some thickness with clay on the top, and see what it will put forth. I suppose it will put forth roots; for so will a cion, being turned down into the clay: therefore, in this experiment also, the tree would be closed with somewhat that is not so natural to the plant as clay is. Try it with leather, or cloth, or painting, so it be not hurtful to the tree. And it is certain, that a brake hath been known to grow out of a pollard.

559. A man may count the prickles of trees to be a kind of excrescence; for they will never be boughs, nor bear leaves. The plants that have prickles are thorns, black and white; brier, rose, lemon-trees, crab-trees, gooseberry, berberry; these have it in the bough: the plants that have

prickles in the leaf are, holly, juniper, whin-bush, thistle; nettles also have a small venomous prickle, so hath borage, but harmless. The cause must be hasty putting forth, want of moisture, and the closeness of the bark, for the haste of the spirit to put forth, and the want of nourishment to put forth a bough, and the closeness of the bark, cause prickles in boughs, and therefore they are ever like a pyramis, for that the moisture spendeth after a little putting forth. And for prickles in leaves, they come also of putting forth more juice into the leaf than can spread in the leaf smooth, and therefore the leaves otherwise are rough, as borage and nettles are. As for the leaves of holly, they are smooth but never plain, but as it were with folds, for the same cause.

560. There be also plants, that though they have no prickles, yet they have a kind of downy or velvet rind upon their leaves; as rose-campion, stockgillyflowers, colt's-foot; which down or nap cometh of a subtile spirit, in a soft or fat substance. For it is certain, that both stockgillyflowers and rose-campions, stamped, have been applied with success to the wrists of those that have had tertian or quartan agues; and the vapour of colt's-foot hath a sanative virtue towards the lungs, and the leaf also is healing in surgery.

561. Another kind of excrescence is an exudation of plants joined with putrefaction; as we see in oak-apples, which are found chiefly upon the leaves of oaks, and the like upon willows: and country people have a kind of prediction, that if the oak-apple broken be full of worms, it is a sign of a pestilent year, which is a likely thing, because they grow of corruption.

562. There is also upon sweet, or other brier, a fine tuft or brush of moss of divers colours; which if you cut you shall ever find full of little white worms.

Experiments in consort touching the producing of perfect plants without seed.

563. It is certain, that earth taken out of the foundations of vaults and houses, and bottoms of wells, and then put into pots, will put forth sundry kinds of herbs: but some time is required for the germination: for if it be taken but from a fathom deep, it will put forth the first year; if much deeper, not till after a year or two.

564. The nature of the plants growing out of earth so taken up, doth follow the nature of the mould itself; as, if the mould be soft and fine, it putteth forth soft herbs, as grass, plantain, and the like; if the earth be harder and coarser, it putteth forth herbs more rough, as thistles, firs, &c.

565. It is common experience, that where alleys are close gravelled, the earth putteth forth the first year knot grass, and after spire grass. The cause is, for that the hard gravel or pebble at the first laying will not suffer the grass to come forth upright, but turneth it to find his way where it can; but after that the earth is somewhat loosened at the top, the ordinary grass cometh up.

566. It is reported, that earth being taken out of shady and watery woods some depth, and potted, will put forth herbs of a fat and juicy substance; as pennywort, purslane, houseleek, pennyroyal, &c.

567. The water also doth send forth plants that have no roots fixed in the bottom, but they are less perfect plants, being almost but leaves, and those small ones; such is that we call duckweed, which hath a leaf no bigger than a thyme leaf, but of a fresher green, and putteth forth a little string into the water far from the bottom. As for the water-lily, it hath a root in the ground; and so have a number of other herbs that grow in ponds.

568. It is reported by some of the ancients, and some modern testimony likewise, that there be some plants that grow upon the top of the sea, being supposed to grow of some concretion of slime from the water, where the sun beateth hot, and where the sea stirreth little. As for alga marina, sea weed, and eryngium, sea thistle, both have roots; but the sea weed under the water, the sea thistle but upon the shore.

569. The ancients have noted, that there are some herbs that grow out of snow laid up close together and putrefied, and that they are all bitter, and they name one specially, "flomus," which we call moth-mullein. It is certain, that worms are found in snow commonly, like earth-worms; and therefore it is not unlike, that it may likewise put forth plants.

570. The ancients have affirmed, that there are some herbs that grow out of stone, which may be, for that it is certain that toads have been found in the middle of a free-stone. We see also that flints, lying above ground, gather moss; and wall flowers, and some other flowers, grow upon walls; but whether upon the main brick or stone, or whether out of the lime or chinks, is not well observed: for elders and ashes have been seen to grow out of steeples; but they manifestly grow out of clefts; insomuch as when they grow big they will disjoin the stone. And besides, it is doubtful whether the mortar itself putteth it forth, or whether some seeds be not let fall by birds. There be likewise rock-herbs, but I suppose those are where there is some mould or earth. It hath likewise been found, that great trees growing upon quarries have put down their root into the stone.

571. In some mines in Germany, as is reported, there grow in the bottom vegetables, and the workfolks use to say they have magical virtue, and will not suffer men to gather them.

572. The sea sands seldom bear plants. Whereof the cause is yielded by some of the ancients, for that the sun exhaleth the moisture before it can incorporate with the earth, and yield a nourishment for the plant. And it is affirmed also

that sand hath always its root in clay; and that there be no veins of sand any great depth within the earth.

573. It is certain, that some plants put forth for a time of their own store, without any nourishment from earth, water, stone, &c., of which vide the experiment 29.

Experiments in consort touching foreign plants.

574. It is reported, that earth that was brought out of the Indies and other remote countries for ballast of ships, cast upon some grounds in Italy, did put forth foreign herbs, to us in Europe not known; and, that which is more, that of their roots, barks, and seeds, contused together, and mingled with other earth, and well watered with warm water, there came forth herbs much like the other.

575. Plants brought out of hot countries will endeavour to put forth at the same time that they usually do in their own climate; and therefore to preserve them, there is no more required, than to keep them from the injury of putting back by cold. It is reported also, that grain out of the hotter countries translated into the colder, will be more forward than the ordinary grain of the cold country. It is likely that this will prove better in grains than in trees, for that grains are but annual, and so the virtue of the seed is not worn out; whereas in a tree it is embased by the ground to which it is removed.

576. Many plants which grow in the hotter countries, being set in the colder, will nevertheless, even in those cold countries, being sown of seeds late in the spring, come up and abide most part of the summer; as we find it in orange and lemon seeds, &c., the seeds whereof sown in the end of April will bring forth excellent salads, mingled with other herbs. And I doubt not, but the seeds of clove-trees, and pepper seeds, &c., if they could come hither green enough to be sown, would do the like.

Experiments in consort touching the seasons in which plants come forth.

577. There be some flowers, blossoms, grains, and fruits, which come more early, and others which come more late in the year. The flowers that come early with us are primroses, violets, anemonies, water-daffodillies, crocus vernus, and some early tulips. And they are all cold plants; which therefore, as it should seem, have a quicker perception of the heat of the sun increasing than the hot herbs have; as a cold hand will sooner find a little warmth than a hot. And those that come next after are wallflowers, cowslips, hyacinths, rosemary flowers, &c., and after them pinks, roses, flower-de-luces, &c., and the latest are gillyflowers, holycoks, larksfoot, &c. The earliest blossoms are the blossoms of peaches, almonds, cornelians, mezerious, &c., and they are of such trees as have much moisture, either watery or oily. And therefore crocus vernus also being an herb that hath an oily juice, putteth forth early; for those also find the sun sooner than the drier trees. The grains are, first, rye and wheat, then oats and barley, then peas and beans. For though green peas and beans be eaten sooner, yet the dry ones that are used for horse meat, are ripe last; and it seemeth that the fatter grain cometh first. The earliest fruits are strawberries, cherries, gooseberries, currants; and after them early apples, early pears, apricots, rasps; and after them damascenes, and most kind of plums, peaches, &c., and the latest are apples, wardens, grapes, nuts, quinces, almonds, sloes, brier-berries, hips, medlars, services, cornelians, &c.

578. It is to be noted, that, commonly, trees that ripen latest blossom soonest; as peaches, cornelians, sloes, almonds, &c.; and it seemeth to be a work of providence that they blossom so soon; for otherwise they could not have the sun long enough to ripen.

579. There be fruits, but rarely, that come twice a year; as some pears, strawberries, &c. And it seemeth they are such as abound with nourishment; whereby after one period, before the sun waxeth too weak, they can endure another. The violet also, amongst flowers, cometh twice a year, especially the double white; and that also is a plant full of moisture. Roses come twice, but it is not without cutting, as hath been formerly said.

580. In Muscovy, though the corn come not up till late spring, yet their harvest is as early as ours. The cause is, for that the strength of the ground is kept in with the snow; and we see with us, that if it be a long winter, it is commonly a more plentiful year; and after those kind of winters likewise, the flowers and corn, which are earlier and later, do come commonly at once, and at the same time, which troubleth the husbandman many times; for you shall have red roses and damask roses come together; and likewise the harvest of wheat and barley. But this happeneth ever, for that the earlier stayeth for the later, and not that the later cometh sooner.

581. There be divers fruit trees in the hot countries, which have blossoms, and young fruit, and ripe fruit, almost all the year succeeding one another. And it is said the orange hath the like with us for a great part of summer, and so also hath the fig. And no doubt the natural motion of plants is to have so; but that either they want juice to spend, or they meet with the cold of the winter; and therefore this circle of ripening cannot be but in succulent plants and hot countries.

582. Some herbs are but annual, and die, root and all, once a year: as borage, lettuce, cucumbers, musk-melons, basil, tobacco, mustard-seed, and all kinds of corn: some continue many years, as hyssop, germander, lavender, fennel, &c

The cause of the dying is double; the first is the tenderness and weakness of the seed, which maketh the period in a small time: as it is in borage, lettuce, cucumbers, corn, &c., and therefore none of these are hot. The other cause is, for that some herbs can worse endure cold; as basil, tobacco, mustard-seed. And these have all much heat.

Experiments in consort touching the lasting of herbs and trees.

583. The lasting of plants is most in those that are largest of body; as oaks, elm, chestnut, the loat-tree, &c., and this holdeth in trees; but in herbs it is often contrary: for borage, colewort, pompions, which are herbs of the largest size, are of small durance; whereas hyssop, winter-savoury, germander, thyme, sage, will last long. The cause is, for that trees last according to the strength and quantity of their sap and juice, being well munited by their bark against the injuries of the air; but herbs draw a weak juice and have a soft stalk, and therefore those amongst them which last longest are herbs of strong smell, and with a sticky stalk.

584. Trees that bear mast, and nuts, are commonly more lasting than those that bear fruits, especially the moister fruits; as oaks, beeches, chestnuts, walnuts, almonds, pine trees, &c. last longer than apples, pears, plums, &c. The cause is, the fatness and oiliness of the sap, which ever wasteth less than the more watery.

585. Trees that bring forth their leaves late in the year, and cast them likewise late, are more lasting than those that sprout their leaves early, or shed them betimes. The cause is, for that the late coming forth showeth a moisture more fixed, and the other loose and more easily resolved. And the same cause is, that wild trees last longer than garden trees; and in the same kind, those whose fruit is acid more than those whose fruit is sweet.

586. Nothing procureth the lasting of trees, bushes, and herbs, so much as often cutting, for every cutting causeth a renovation of the juice of the plant; that it neither goeth so far, nor riseth so faintly, as when the plant is not cut; insomuch as annual plants, if you cut them seasonably, and will spare the use of them, and suffer them to come up still young, will last more years than one, as hath been partly touched; such as is lettuce, purslane, cucumber, and the like. And for great trees, we see almost all overgrown trees in churchyards, or near ancient buildings, and the like, are pollards, or dottards, and not trees at their full height.

587. Some experiment would be made, how by art to make plants more lasting than their ordinary period; as to make a stalk of wheat, &c. last a whole year. You must ever presuppose, that you handle it so as the winter killeth it not, for we speak only of prolonging the natural period. I conceive that the rule will hold, that whatsoever maketh the herb come later than at its time, will make it last longer time: it were good to try it in a stalk of wheat, &c. set in the shade, and encompassed with a case of wood, not touching the straw, to keep out open air.

As for the preservation of fruits and plants, as well upon the tree or stalk, as gathered, we shall handle it under the title of conservation of bodies.

Experiments in consort touching the several figures of plants.

588. The particular figures of plants we leave to their descriptions; but some few things in general we will observe. Trees and herbs, in the growing forth of their boughs and branches, are not figured, and keep no order. The cause is, for that the sap being restrained in the rind and bark, breaketh not forth at all, as in the bodies of trees, and stalks of herbs, till they begin to branch; and then when they make an eruption, they break forth casually, where they find best way in the bark or rind. It is true, that some trees are more scattered in their boughs; as sallow-trees, warden-trees, quince-trees, medlar-trees, lemon-trees, &c.: some are more in the form of a pyramis, and come almost to todd; as the pear-tree, which the critics will have to borrow his name of πῦρ, fire, orange-trees, fir-trees, service-trees, lime-trees, &c.: and some are more spread and broad; as beeches, hornbeam, &c., the rest are more indifferent. The cause of scattering the boughs, is the hasty breaking forth of the sap; and therefore those trees rise not in a body of any height, but branch near the ground. The cause of the pyramis is the keeping in of the sap long before it branch; and the spending of it, when it beginneth to branch, by equal degrees. The spreading is caused by the carrying up of the sap plentifully without expense; and then putting it forth speedily and at once.

589. There be divers herbs, but no trees, that may be said to have some kind of order in the putting forth their leaves; for they have joints or knuckles, as it were stops in their germination; as have gillyflowers, pinks, fennel, corn, reeds, and canes. The cause whereof is, for that the sap ascendeth unequally, and doth, as it were, tire and stop by the way. And it seemeth they have some closeness and hardness in their stalk, which hindereth the sap from going up, until it hath gathered into a knot, and so is more urged to put forth. And therefore they are most of them hollow when the stalk is dry, as fennel-stalk, stubble, and canes.

590. Flowers have all exquisite figures; and the flower numbers are chiefly five, and four; as in primroses, brier-roses, single musk roses, single pinks, and gillyflowers, &c., which have five leaves: lilies, flower-de-luces, borage, bugloss, &c., which have four leaves. But some put forth leaves not numbered; but they are ever small ones; as marygolds, trefoils, &c. We see also,

that the sockets and supporters of flowers are figured; as in the five brethren of the rose, sockets of gillyflowers, &c. Leaves also are all figured; some round; some long; none square; and many jagged on the sides: which leaves of flowers seldom are. For I account the jagging of pinks and gillyflowers to be like the inequality of oak leaves, or vine leaves, or the like: but they seldom or never have any small purls.

Experiments in consort touching some principal differences in plants.

591. Of plants, some few put forth their blossoms before their leaves; as almonds, peaches, cornelians, black thorn, &c.; but most put forth some leaves before their blossoms; as apples, pears, plums, cherries, white thorn, &c. The cause is, for that those that put forth their blossoms first, have either an acute and sharp spirit, and therefore commonly they all put forth early in the spring, and ripen very late; as most of the particulars before mentioned, or else an oily juice, which is apter to put out flowers than leaves.

592. Of plants, some are green all winter; others cast their leaves. There are green all winter, holly, ivy, box, fir, yew, cypress, juniper, bays, rosemary, &c. The cause of the holding green, is the close and compact substance of their leaves, and the pedicles of them. And the cause of that again is, either the tough and viscous juice of the plant, or the strength and heat thereof. Of the first sort is holly, which is of so viscous a juice as they make birdlime of the bark of it. The stalk of ivy is tough, and not fragile, as we see in other small twigs dry. Fir, yieldeth pitch. Box is a fast heavy wood, as we see it in bowls. Yew is a strong and tough wood, as we see it in bows. Of the second sort is juniper, which is a wood odorate, and maketh a hot fire. Bays is likewise a hot and aromatical wood; and so is rosemary for a shrub. As for the leaves, their density appeareth, in that either they are smooth and shining, as in bays, holly, ivy, box, &c., or in that they are hard and spiry, as in the rest. And trial would be made of grafting of rosemary, and bays, and box, upon a holly-stock, because they are plants that come all winter. It were good to try it also with grafts of other trees, either fruit trees, or wild trees, to see whether they will not yield their fruit, or bear their leaves later and longer in the winter; because the sap of the holly putteth forth most in the winter. It may be also a mezerion-tree, grafted upon a holly, will prove both an earlier and a greater tree.

593. There be some plants that bear no flower and yet bear fruit; there be some that bear flowers and no fruit; there be some that bear neither flowers nor fruit. Most of the great timber trees, as oaks, beeches, &c. bear no apparent flowers; some few likewise of the fruit trees, as mulberry, walnut, &c., and some shrubs, as juniper, holly, &c., bear no flowers. Divers herbs also bear seeds, which is as the fruit, and yet bear no flowers, as purslane, &c. Those that bear flowers and no fruit are few, as the double cherry, the sallow, &c. But for the cherry, it is doubtful whether it be not by art or culture; for if it be by art, then trial would be made, whether apple and other fruit blossoms may not be doubled. There are some few that bear neither fruit nor flower, as the elm, poplars, box, brakes, &c

594. There be some plants, that shoot still upwards and can support themselves, as the greatest part of trees and plants; there be some other that creep along the ground, or wind about other trees or props, and cannot support themselves, as vines, ivy, brier, briony, woodbines, hops, climatis, camomile, &c. The cause is, as hath been partly touched, for that all plants naturally move upwards; but if the sap put up too fast, it maketh a slender stalk, which will not support the weight; and therefore these latter sort are all swift and hasty comers.

Experiments in consort touching all manner of composts, and helps of ground.

595. The first and most ordinary help is stercoration. The sheep's dung is one of the best; and next the dung of kine: and thirdly, that of horses, which is held to be somewhat too hot unless it be mingled. That of pigeons for a garden, as a small quantity of ground, excelleth. The ordering of dung is, if the ground be arable, to spread it immediately before the ploughing and sowing; and so to plough it in: for if you spread it long before, the sun will draw out much of the fatness of the dung: if the ground be grazing ground, to spread it somewhat late towards winter, that the sun may have the less power to dry it up. As for special composts for gardens, as a hot bed, &c. we have handled them before.

596. The second kind of compost is, the spreading of divers kinds of earths; as marle, chalk, sea sand, earth upon earth, pond earth; and the mixtures of them. Marle is thought to be the best, as having most fatness; and not heating the ground too much. The next is sea sand, which no doubt obtaineth a special virtue by the salt; for salt is the first rudiment of life. Chalk over-heateth the ground a little; and therefore is best upon cold clay grounds, or moist grounds; but I heard a great husband say, that it was a common error, to think that chalk helpeth arable ground, but helpeth not grazing grounds; whereas, indeed, it helpeth grass as well as corn: but that which breedeth the error is, because after the chalking of the ground they wear it out with many crops without rest, and then indeed afterwards it will bear little grass, because the ground is tired out. It were good to try the laying of chalk upon arable grounds a little while before ploughing; and to plough it in as they do the

dung; but then it must be friable first by rain or lying. As for earth, it composeth itself; for I knew a great garden that had a field, in a manner, poured upon it, and it did bear fruit excellently the first year of the planting: for the surface of the earth is ever the fruitfulest. And earth so prepared hath a double surface. But it is true, as I conceive, that such earth as hath saltpetre bred in it, if you can procure it without too much charge, doth excel. The way to hasten the breeding of saltpetre, is to forbid the sun, and the growth of vegetables. And therefore if you make a large hovel, thatched, over some quantity of ground; nay, if you do but plank the ground over, it will breed saltpetre. As for pond earth, or river earth, it is a very good compost; especially if the pond have been long uncleansed, and so the water be not too hungry: and I judge it will be yet better if there be some mixture of chalk.

597. The third help of ground is, by some other substances that have a virtue to make ground fertile, though they be not merely earth; wherein ashes excel; insomuch as the countries about Ætna and Vesuvius have a kind of amends made them, for the mischief the irruptions many times do, by the exceeding fruitfulness of the soil, caused by the ashes scattered about. Soot also, though thin spread in a field or garden, is tried to be a very good compost. For salt, it is too costly; but it is tried, that mingled with seed-corn, and sown together, it doth good: and I am of opinion, that chalk in powder, mingled with seed-corn, would do good; perhaps as much as chalking the ground all over. As for the steeping of the seeds in several mixtures with water to give them vigour, or watering grounds with compost water, we have spoken of them before.

598. The fourth help of ground is, the suffering of vegetables to die into the ground, and so to fatten it; as the stubble of corn, especially peas. Brakes cast upon the ground in the beginning of winter will make it very fruitful. It were good also to try whether leaves of trees swept together, with some chalk and dung mixed, to give them more heart, would not make a good compost; for there is nothing lost so much as leaves of trees; and as they lie scattered, and without mixture, they rather make the ground sour than otherwise.

599. The fifth help of ground is, heat and warmth. It hath been anciently practised to burn heath, and ling, and sedge, with the vantage of the wind, upon the ground. We see that warmth of walls and inclosures mendeth ground: we see also, that lying open to the south mendeth ground: we see again, that the foldings of sheep help ground, as well by their warmth as by their compost: and it may be doubted whether the covering of the ground with brakes in the beginning of the winter, whereof we spake in the last experiment, helpeth it not, by reason of the warmth. Nay, some very good husbands do suspect, that the gathering up of flints in flinty ground, and laying them on heaps, which is much used, is no good husbandry, for that they would keep the ground warm.

600. The sixth help of grounds is by watering and irrigation, which is in two manners; the one by letting in and shutting out waters at seasonable times: for water, at some seasons, and with reasonable stay, doth good; but at some other seasons, and with too long stay, doth hurt: and this serveth only for meadows which are along some river. The other way is, to bring water from some hanging grounds where there are springs, into the lower grounds, carrying it in some long furrows; and from those furrows, drawing it traverse to spread the water. And this maketh an excellent improvement, both for corn and grass. It is the richer, if those hanging grounds be fruitful, because it washeth off some of the fatness of the earth; but howsoever it profiteth much. Generally where there are great overflows in fens, or the like, the drowning of them in the winter maketh the summer following more fruitful: the cause may be, for that it keepeth the ground warm, and nourisheth it. But the fen-men hold, that the sewers must be kept so as the water may not stay too long in the spring till the weeds and sedge be grown up; for then the ground will be like a wood, which keepeth out the sun, and so continueth the wet; whereby it will never graze to purpose that year. Thus much for irrigation. But for avoidances, and drainings of water, where there is too much, and the helps of ground in that kind, we shall speak of them in another place.

CENTURY VII.

Experiments in consort touching the affinities and differences between plants and animate bodies.

601. The differences between animate and inanimate bodies, we shall handle fully under the title of life, and living spirits, and powers. We shall therefore make but a brief mention of them in this place. The main differences are two. All bodies have spirits, and pneumatical parts within them: but the main differences between animate and inanimate are two: the first is, that the spirits of things animate are all continued with themselves, and are branched in veins, and secret canals, as blood is: and in living creatures, the spirits have not only branches, but certain cells or seats, where the principal spirits do reside, and whereunto the rest do resort; but the spirits in things inanimate are shut in, and cut off by the tangible parts, and are not pervious one to another, as air is in snow. The second main difference is, that the spirits of animate bodies are all in some degree, more or less, kindled and inflamed; and have a fine commixture of flame, and an aerial substance. But inanimate bodies have their spirits no whit inflamed or kindled. And this difference consisteth not in the heat or coolness of spirits; for cloves and other spices, naphtha and petroleum, have exceeding hot spirits, hotter a great deal than oil, wax, or tallow, &c., but not inflamed. And when any of those weak and temperate bodies come to be inflamed, then they gather a much greater heat than others have uninflamed, besides their light and motion, &c.

602. The differences, which are secondary, and proceed from these two radical differences, are, first, plants are all figurate and determinate, which inanimate bodies are not; for look how far the spirit is able to spread and continue itself, so far goeth the shape of figure, and then is determined. Secondly, plants do nourish, inanimate bodies do not; they have an accretion, but no alimentation. Thirdly, plants have a period of life, which inanimate bodies have not. Fourthly, they have a succession and propagation of their kind which is not in bodies inanimate.

603. The differences between plants, and metals or fossils, besides those four before-mentioned, for metals I hold inanimate, are these; first, metals are more durable than plants; secondly, they are more solid and hard; thirdly, they are wholly subterrany; whereas plants are part above earth and part under earth.

604. There be very few creatures that participate of the nature of plants and metals both; coral is one of the nearest of both kinds: another is vitriol, for that is aptest to sprout with moisture.

605. Another special affinity is between plants and mould or putrefaction; for all putrefaction, if it dissolve not in arefaction, will in the end issue into plants or living creatures bred of putrefaction. I account moss, and mushrooms, and agaric, and other of those kinds, to be but moulds of the ground, walls, and trees, and the like. As for flesh, and fish, and plants themselves, and a number of other things, after a mouldiness, or rottenness, or corrupting, they will fall to breed worms. These putrefactions, which have affinity with plants, have this difference from them: that they have no succession or propagation, though they nourish, and have a period of life, and have likewise some figure.

606. I left once by chance a citron cut, in a close room, for three summer months that I was absent; and at my return there were grown forth, out of the pith cut, tufts of hairs an inch long, with little black heads, as if they would have been some herb.

Experiments in consort touching the affinities and differences of plants and living creatures, and the confiners and participles of them.

607. The affinities and differences between plants and living creatures are these that follow. They have both of them spirits continued, and branched, and also inflamed. But first in living creatures, the spirits have a cell or seat, which plants have not: as was also formerly said. And secondly, the spirits of living creatures hold more of flame than the spirits of plants do. And these two are the radical differences. For the secondary differences, they are as follow:—First plants are all fixed to the earth, whereas all living creatures are severed, and of themselves. Secondly, living creatures have local motion, plants have not. Thirdly, living creatures nourish from their upper parts, by the mouth chiefly; plants nourish from below, namely, from the roots. Fourthly, plants have their seed and seminal parts uppermost; living creatures have them lowermost; and therefore it was said, not elegantly alone, but philosophically; "Homo est planta inversa;" Man is like a plant turned upwards: for the root in plants is as the head in living creatures. Fifthly, living creatures have a more exact figure than plants. Sixthly, living creatures have more diversity of organs within their bodies, and, as it were, inward figures, than plants have. Seventhly, living creatures have sense, which plants have not. Eighthly, living creatures have voluntary motion, which plants have not.

608. For the difference of sexes in plants they are oftentimes by name distinguished, as male-piony, female-piony, male-rosemary, female-rosemary, he-holly, she-holly, &c; but generation by

copulation certainly extendeth not to plants. The nearest approach of it is between the he-palm and the she-palm, which, as they report, if they grow near, incline the one to the other, insomuch as that, which is more strange, they doubt not to report, that to keep the trees upright from bending, they tie ropes or lines from the one to the other, that the contact might be enjoyed by the contact of a middle body. But this may be feigned, or at least amplified. Nevertheless I am apt enough to think, that this same binarium of a stronger and a weaker, like unto masculine and feminine, doth hold in all living bodies. It is confounded sometimes, as in some creatures of putrefaction, wherein no marks of distinction appear: and it is doubled sometimes, as in hermaphrodites: but generally there is a degree of strength in most species.

609. The participles or confiners between plants and living creatures, are such chiefly as are fixed, and have no local motion of remove, though they have a motion in their parts, such as are oysters, cockles, and such like. There is a fabulous narration, that in the northern countries there should be an herb that groweth in the likeness of a lamb, and feedeth upon the grass, in such sort as it will bare the grass round about. But I suppose that the figure maketh the fable; for so, we see, there be bee-flowers, &c. And as for the grass, it seemeth the plant having a great stalk and top doth prey upon the grass a good way about, by drawing the juice of the earth from it.

Experiments promiscuous touching plants.

610. The Indian fig boweth its roots down so low in one year, as of itself it taketh root again, and so multiplieth from root to root, making of one tree a kind of wood. The cause is the plenty of the sap, and the softness of the stalk, which maketh the bough, being over-loaden, and not stiffly upheld, weigh down. It hath leaves as broad as a little target, but the fruit no bigger than beans. The cause is, for that the continual shade increaseth the leaves, and abateth the fruit, which nevertheless is of a pleasant taste. And that no doubt is caused by the suppleness and gentleness of the juice of that plant, being that which maketh the boughs also so flexible.

611. It is reported by one of the ancients, that there is a certain Indian tree, having few but very great leaves, three cubits long and two broad, and that the fruit, being of good taste, groweth out of the bark. It may be, there be plants that pour out the sap so fast, as they have no leisure either to divide into many leaves, or to put forth stalks to the fruit. With us, trees, generally, have small leaves in comparison. The fig hath the greatest; and next it the vine, mulberry, and sycamore, and the least are those of the willow, birch, and thorn. But there be found herbs with far greater leaves than any tree; as the bur, gourd, cucumber and colewort. The cause is, like to that of the Indian fig, the hasty and plentiful putting forth of the sap.

612. There be three things in use for sweetness; sugar, honey, manna. For sugar, to the ancients it was scarce known, and little used. It is found in canes: *Query*, whether to the first knuckle, or further up? And whether the very bark of the cane itself do yield sugar or no? For honey, the bee maketh it, or gathereth it; but I have heard from one that was industrious in husbandry, that the labour of the bee is about the wax; and that he hath known in the beginning of May honeycombs empty of honey; and within a fortnight, when the sweet dews fall, filled like a cellar. It is reported also by some of the ancients, that there is a tree called occhus, in the valleys of Hyrcania, that distilleth honey in the mornings. It is not unlike that the sap and tears of some trees may be sweet. It may be also, that some sweet juices, fit for many uses, may be concocted out of fruits, to the thickness of honey, or perhaps of sugar; the likeliest are raisins of the sun, figs, and currants; the means may be inquired.

613. The ancients report of a tree by the Persian sea, upon the shore sands, which is nourished with the salt water; and when the tide ebbeth, you shall see the roots as it were bare without bark, being as it seemeth corroded by the salt, and grasping the sands like a crab; which nevertheless beareth a fruit. It were good to try some hard trees, as a service-tree, or fir-tree, by setting them within the sands.

614. There be of plants which they use for garments, these that follow: hemp, flax, cotton, nettles, whereof they make nettle-cloth, sericum, which is a growing silk; they make also cables of the bark of lime trees. It is the stalk that maketh the filaceous matter commonly; and sometimes the down that groweth above.

615. They have in some countries a plant of a rosy colour, which shutteth in the night, openeth in the morning, and openeth wide at noon; which the inhabitants of those countries say is a plant that sleepeth. There be sleepers enough then; for almost all flowers do the like.

616. Some plants there are, but rare, that have a mossy or downy root; and likewise that have a number of threads, like beards, as mandrakes, whereof witches and impostors make an ugly image, giving it the form of a face at the top of the root, and leaving those strings to make a broad beard down to the foot. Also there is a kind of nard in Crete, being a kind of phu, that hath a root hairy, like a rough-footed dove's foot. So as you may see, there are of roots, bulbous roots, fibrous roots, and hirsute roots. And, I take it, in the bulbous, the sap hasteneth most to the air and sun; in the fibrous, the sap delighteth more in the earth, and therefore putteth downward; and the hirsute is a middle between both, that besides

the putting forth upwards and downwards putteth forth in round.

617. There are some tears of trees, which are combed from the beards of goats: for when the goats bite and crop them, especially in the mornings, the dew being on, the tear cometh forth, and hangeth upon their beards: of this sort is some kind of laudanum.

618. The irrigation of the plane-tree by wine, is reported by the ancients to make it fruitful. It would be tried likewise with roots; for upon seeds it worketh no great effects.

619. The way to carry foreign roots a long way, is to vessel them close in earthen vessels. But if the vessels be not very great, you must make some holes in the bottom, to give some refreshment to the roots; which, otherwise, as it seemeth, will decay and suffocate.

620. The ancient cinnamon was, of all other plants, while it grew, the dryest, and those things which are known to comfort other plants did make that more sterile; for in showers it prospered worst: it grew also amongst bushes of other kinds, where commonly plants do not thrive, neither did it love the sun. There might be one cause of all those effects; namely, the sparing nourishment which that plant required. *Query*, how far cassia, which is now the substitute of cinnamon, doth participate of these things?

621. It is reported by one of the ancients, that cassia, when it is gathered, is put into the skins of beasts newly flayed; and that the skins corrupting and breeding worms, the worms do devour the pith and marrow of it, and so make it hollow, but meddle not with the bark, because to them it is bitter.

622. There were in ancient time vines of far greater bodies than we know any, for there have been cups made of them, and an image of Jupiter. But it is like they were wild vines; for the vines that they use for wine, are so often cut, and so much digged and dressed, that their sap spendeth into the grapes, and so the stalk cannot increase much in bulk. The wood of vines is very durable, without rotting. And that which is strange, though no tree hath the twigs, while they are green, so brittle, yet the wood dried is extreme tough, and was used by the captains of armies amongst the Romans for their cudgels.

623. It is reported, that in some places vines are suffered to grow like herbs, spreading upon the ground, and that the grapes of those vines are very great. It were good to make trial, whether plants that use to be borne up by props will not put forth greater leaves and greater fruits if they be laid along the ground; as hops, ivy, woodbine, &c.

624. Quinces, or apples, &c., if you will keep them long, drown them in honey; but because honey, perhaps, will give them a taste over-luscious, it were good to make trial in powder of sugar, or in syrup of wine, only boiled to height. Both these would likewise be tried in oranges, lemons, and pomegranates; for the powder of sugar, and syrup of wine, will serve for more times than once.

625. The conservation of fruit would be also tried in vessels filled with fine sand, or with powder of chalk; or in meal and flour; or in dust of oak wood; or in mill.

626. Such fruits as you appoint for long keeping, you must gather before they be full ripe; and in a fair and dry day towards noon; and when the wind bloweth not south; and when the moon is under the earth, and in decrease.

627. Take grapes, and hang them in an empty vessel well stopped; and set the vessel not in a cellar, but in some dry place, and it is said they will last long. But it is reported by some, they will keep better in a vessel half full of wine, so that the grapes touch not the wine.

628. It is reported, that the preserving of the stalk helpeth to preserve the grapes; especially if the stalk be put into the pith of elder, the elder not touching the fruit.

629. It is reported by some of the ancients, that fruit put in bottles, and the bottles let down into wells under water, will keep long.

630. Of herbs and plants, some are good to eat raw; as lettuce, endive, purslane, tarragon, cresses, cucumbers, musk-melons, radish, &c.; others only after they are boiled, or have passed the fire; as parsley, clary, sage, parsnips, turnips, asparagus, artichokes, though they also being young are eaten raw: but a number of herbs are not esculent at all; as wormwood, grass, green corn, centaury, hyssop, lavender, balm, &c. The causes are, for that the herbs that are not esculent do want the two tastes in which nourishment resteth; which are fat and sweet; and have, contrariwise, bitter and over-strong tastes, or a juice so crude as cannot be ripened to the degree of nourishment. Herbs and plants that are esculent raw have fatness, or sweetness, as all esculent fruits: such are onions, lettuce, &c. But then it must be such a fatness, (for as for sweet things, they are in effect always esculent,) as is not overgross, and loading of the stomach: for parsnips and leeks have fatness, but it is too gross and heavy without boiling. It must be also in a substance somewhat tender; for we see wheat, barley, artichokes, are no good nourishment till they have passed the fire; but the fire doth ripen, and maketh them soft and tender, and so they become esculent. As for radish and tarragon, and the like, they are for condiments, and not for nourishment. And even some of those herbs which are not esculent, are notwithstanding poculent; as hops, broom, &c. *Query*, what herbs are good for drink besides the two aforenamed; for that it may, perhaps, ease the charge of brewing, if they make beer to require less malt, or make it last longer.

631. Parts fit for the nourishment of man in plants are, seeds, roots, and fruits; but chiefly

seeds and roots. For leaves, they give no nourishment at all, or very little: no more do flowers, or blossoms, or stalks. The reason is, for that roots, and seeds, and fruits, inasmuch as all plants consist of an oily and watery substance commixed, have more of the oily substance, and leaves, flowers, &c. of the watery. And secondly, they are more concocted; for the root which continueth ever in the earth is still concocted by the earth; and fruits and grains we see are half a year or more in concocting; whereas leaves are out and perfect in a month.

632. Plants, for the most part, are more strong both in taste and smell in the seed than in the leaf and root. The cause is, for that in plants that are not of a fierce and eager spirit, the virtue is increased by concoction and maturation, which is ever most in the seed; but in plants that are of a fierce and eager spirit, they are stronger whilst the spirit is enclosed in the root, and the spirits do but weaken and dissipate when they come to the air and sun; as we see it in onions, garlick, dragon, &c. Nay, there be plants that have their roots very hot and aromatical, and their seeds rather insipid, as ginger. The cause is, as was touched before, for that the heat of those plants is very dissipable; which under the earth is contained and held in; but when it cometh to the air it exhaleth.

633. The juices of fruits are either watery or oily. I reckon among the watery, all the fruits out of which drink is expressed; as the grape, the apple, the pear, the cherry, the pomegranate, &c. And there are some others which, though they be not in use for drink, yet they appear to be of the same nature; as plums, services, mulberries, rasps, oranges, lemons, &c.; and for those juices that are so fleshy, as they cannot make drink by expression, yet, perhaps, they may make drink by mixture of water.

Poculaque admistis imitantur vitea sorbis.

And it may be hips and brier-berries would do the like. Those that have oily juice, are olives, almonds, nuts of all sorts, pine-apples, &c., and their juices are all inflammable. And you must observe also, that some of the watery juices, after they have gathered spirit, will burn and inflame; as wine. There is a third kind of fruit that is sweet, without either sharpness or oiliness: such as is the fig and the date.

634. It hath been noted, that most trees, and specially those that bear mast, are fruitful but once in two years. The cause, no doubt, is the expense of sap; for many orchard trees, well cultured, will bear divers years together.

635. There is no tree, which besides the natural fruit doth bear so many bastard fruits as the oak doth: for besides the acorn, it beareth galls, oak apples, and certain oak nuts, which are inflammable, and certain oak berries, sticking close to the body of the tree without stalk. It beareth also misseltoe, though rarely. The cause of all these may be, the closeness and solidness of the wood and pith of the oak, which maketh several juices find several eruptions. And therefore if you will devise to make any super-plants, you must ever give the sap plentiful rising and hard issue.

636. There are two excrescences which grow upon trees; both of them in the nature of mushrooms: the one the Romans call boletus; which groweth upon the roots of oaks, and was one of the dainties of their table; the other is medicinal, that is called agaric, whereof we have spoken before, which groweth upon the tops of oaks; though it be affirmed by some, that it groweth also at the roots. I do conceive that many excrescences of trees grow chiefly [illegible] is dead or faded; for that the [illegible] tree corrupteth into some preternatural [illegible]

637. The greater part of trees bear most [illegible] best on the lower boughs; as oaks, figs, walnuts, pears, &c.; but some bear best on the top boughs, as crabs, &c. Those that bear best below, are such as shade doth more good to than hurt. For generally all fruits bear best lowest, because the sap tireth not, having but a short way: and therefore in fruits spread upon walls, the lowest are the greatest, as was formerly said: so it is the shade that hindereth the lower boughs, except it be in such trees as delight in shade, or at least bear it well. And therefore they are either strong trees, as the oak, or else they have large leaves, as the walnut and fig, or else they grow in pyramis, as the pear. But if they require very much sun, they bear best on the top, as it is in crabs, apples, plums, &c.

638. There be trees that bear best when they begin to be old, as almonds, pears, vines, and all trees that give mast: the cause is, for that all trees that bear mast have an oily fruit; and young trees have a more watery juice, and less concocted, and of the same kind also is the almond. The pear likewise, though it be not oily, yet it requireth much sap, and well concocted, for we see it is a heavy fruit and solid, much more than apples, plums, &c. As for the vine, it is noted, that it beareth more grapes when it is young; but grapes that make better wine when it is old; for that the juice is better concocted; and we see that wine is inflammable, so as it hath a kind of oiliness. But the most part of trees, amongst which are apples, plums, &c. bear best when they are young.

639. There be plants that have a milk in them when they are cut, as figs, old lettuce, sow-thistles, spurge, &c. The cause may be an inception of putrefaction: for those milks have all an acrimony: though one would think they should be lenitive. For if you write upon paper with the milk of the fig, the letters will not be seen until you hold the paper before the fire, and then they wax brown: which showeth that it is a sharp or fretting juice: lettuce is thought poisonous, when

it is so old as to have milk; spurge is a kind of poison in itself, and as for sow-thistles, though coneys eat them, yet sheep and cattle will not touch them: and besides, the milk of them rubbed upon warts, in short time weareth them away; which showeth the milk of them to be corrosive. We see also that wheat and other corn, sown, if you take them forth of the ground before they sprout, are full of milk, and the beginning of germination is ever a kind of putrefaction of the seed. Euphorbium also hath a milk, though not very white, which is of a great acrimony: and salladine hath a yellow milk, which hath likewise much acrimony; for it cleanseth the eyes. It is good also for cataracts.

640. Mushrooms are reported to grow, as well upon the bodies of trees, as upon their roots, or upon the earth; and especially upon the oak. The cause is, for that strong trees are towards such excrescences in the nature of earth; and therefore put forth moss, mushrooms, and the like.

641. There is hardly found a plant that yieldeth a red juice in the blade or ear; except it be the tree that beareth draconis sanguis; which groweth chiefly in the island Socotra: the herb amaranthus, indeed, is red all over; and brazil is red in the wood: and so is red sanders. The tree of the sanguis draconis groweth in the form of a sugar-loaf. It is like that the sap of that plant concocteth in the body of the tree. For we see that grapes and pomegranates are red in the juice, but are green in the tear: and this maketh the tree of sanguis draconis lesser towards the top; because the juice hasteneth not up: and besides, it is very astringent; and therefore of slow motion.

642. It is reported that sweet moss, besides that upon the apple trees, groweth likewise sometimes upon poplars; and yet generally the poplar is a smooth tree of bark, and hath little moss. The moss of the larix-tree burneth also sweet, and sparkleth in the burning. *Query* of the mosses of odorate trees, as cedar, cypress, lignum aloes, &c.

643. The death that is most without pain, hath been noted to be upon the taking of the potion of hemlock; which in humanity was the form of execution of capital offenders in Athens. The poison of the asp, that Cleopatra used, hath some affinity with it. The cause is, for that the torments of death are chiefly raised by the strife of the spirits; and these vapours quench the spirits by degrees; like to the death of an extreme old man. I conceive it is less painful than opium, because opium hath parts of heat mixed.

644. There be fruits that are sweet before they be ripe, as myrobalanes; so fennel seeds are sweet before they ripen, and after grow spicy. And some never ripen to be sweet; as tamarinds, berberries, crabs, sloes, &c. The cause is, for that the former kind have much and subtle heat, which causeth early sweetness; the latter have a cold and acid juice, which no heat of the sun can sweeten. But as for the myrobalane, it hath parts of contrary natures; for it is sweet and yet astringent.

645. There be few herbs that have a salt taste; and contrariwise all blood of living creatures hath a saltness. The cause may be, for that salt, though it be the rudiment of life, yet in plants the original taste remaineth not; for you shall have them bitter, sour, sweet, biting, but seldom salt; but in living creatures, all those high tastes may happen to be sometimes in the humours, but are seldom in the flesh or substance, because it is of a more oily nature; which is not very susceptible of those tastes, and the saltness itself of blood is but a light and secret saltness: and even among plants, some do participate of saltness, as alga marina, samphire, scurvy grass, &c. And the report, there is in some of the Indian seas a swimming plant, which they call salgazus, spreading over the sea in such sort as one would think it were a meadow. It is certain, that out of the ashes of all plants they extract a salt which they use in medicines.

646. It is reported by one of the ancients, that there is an herb growing in the water, called lincostis, which is full of prickles: this herb putteth forth another small herb out of the leaf; which is imputed to some moisture that is gathered between the prickles, which putrefied by the sun germinateth. But I remember also I have seen, for a great rarity, one rose grow out of another like honeysuckles, that they call top and top-gallants.

647. Barley, as appeareth in the malting, being steeped in water three days, and afterwards the water drained from it, and the barley turned upon a dry floor, will sprout half an inch long at least: and if it be let alone, and not turned, much more; until the heart be out. Wheat will do the same. Try it also with peas and beans. This experiment is not like that of the orpine and semper-vive, for there it is of the old store, for no water is added, but here it is nourished from the water. The experiment would be farther driven: for it appeareth already, by that which hath been said, that earth is not necessary to the first sprouting of plants, and we see that rose-buds set in water will blow: therefore try whether the sprouts of such grains may not be raised to a farther degree, as to an herb, or flower, with water only, or some small commixture of earth: for if they will, it should seem by the experiments before, both of the malt and of the roses, that they will come far faster on in water than in earth; for the nourishment is easilier drawn out of water than out of earth. It may give some light also, that drink infused with flesh, as that with the capon, &c., will nourish faster and easilier than meat and drink together. Try the same experi-

ment with roots as well as with grains: as for example, take a turnip, and steep it a while, and then dry it, and see whether it will sprout.

648. Malt in the drenching will swell; and that in such a manner, as after the putting forth in sprouts, and the drying upon the kiln, there will be gained at least a bushel in eight, and yet the sprouts are rubbed off, and there will be a bushel of dust besides the malt, which I suppose to be, not only by the loose and open lying of the parts, but by some addition of substance drawn from the water in which it was steeped.

649. Malt gathereth a sweetness to the taste, which appeareth yet more in the wort. The dulcoration of things is worthy to be tried to the full: for that dulcoration importeth a degree to nourishment: and the making of things inalimental to become alimental, may be an experiment of great profit for making new victual.

650. Most seeds in the growing leave their husk or rind about the root; but the onion will carry it up, that it will be like a cap upon the top of the young onion. The cause may be, for that the skin or husk is not easy to break; as we see by the pilling of onions, what a holding substance the skin is.

651. Plants, that have curled leaves, do all abound with moisture; which cometh so fast on, as they cannot spread themselves plain, but must needs gather together. The weakest kind of curling is roughness, as in clary and burr. The second is curling on the sides; is in lettuce, and young cabbage: and the third is folding into a head; as in cabbage full grown, and cabbage-lettuce.

652. It is reported that fir and pine, especially if they be old and putrefied, though they shine not as some rotten woods do, yet in the sudden breaking they will sparkle like hard sugar.

653. The roots of trees do some of them put downwards deep into the ground; as the oak, pine, fir, &c. Some spread more toward the surface of the earth; as the ash, cypress-tree, olive, &c. The cause of this latter may be, for that such trees as love the sun do not willingly descend far into the earth, and therefore they are, commonly, trees that shoot up much; for in their body their desire of approach to the sun maketh them spread the less. And the same reason under ground, to avoid recess from the sun, maketh them spread the more. And we see it cometh to pass in some trees which have been planted too deep in the ground, that for love of approach to the sun, they forsake their first root, and put out another more towards the top of the earth. And we see also, that the olive is full of oily juice; and ash maketh the best fire, and cypress is a hot tree. As for the oak, which is of the former sort, it loveth the earth, and therefore groweth slowly. And for the pine and fir likewise, they have so much heat in themselves as they need less the heat of the sun. There be herbs also that have the same difference; as the herb they call morsus diaboli; which putteth forth the root down so low as you cannot pull it up without breaking; which gave occasion to the name and fable; for that it was said, it was so wholesome a root, that the devil, when it was gathered, bit it for envy: and some of the ancients do report, that there was a goodly fir, which they desired to remove the whole, that had a root under ground eight cubits deep; and so the root came up broken.

654. It hath been observed, that a branch of a tree, being unbarked some space at the bottom, and so set into the ground, hath grown; even of such trees, as if the branch were set with the bark on, they would not grow; yet contrariwise we see, that a tree pared round in the body above ground will die. The cause may be, for that the unbarked part draweth the nourishment best, but the bark continueth it only.

655. Grapes will continue fresh and moist all winter long, if you hang them cluster by cluster in the roof of a warm room; especially if when you gather the cluster you take off with the cluster some of the stock.

656. The reed or cane is a watery plant, and groweth not but in the water: it hath these properties: that it is hollow, that it is knuckled both stalk and root, that being dry, it is more hard and fragile than other wood, that it putteth forth no boughs, though many stalks come out of one root. It differeth much in greatness, the smallest being fit for thatching of houses, and stopping the chinks of ships better than glue or pitch The second bigness is used for angle-rods and staves; and in China for beating of offenders upon the thighs. The differing kinds of them are, the common reed, the cassia fistula, and the sugar-reed. Of all plants it boweth the easiest, and riseth again. It seemeth, that amongst plants which are nourished with mixture of earth and water, it draweth most nourishment from water; which maketh it the smoothest of all others in bark, and the hollowest in body.

657. The sap of trees when they are let blood, is of differing natures. Some more watery and clear, as that of vines, of beeches, of pears: some thick, as apples: some gummy, as cherries: some frothy, as elms: some milky, as figs. In mulberries the sap seemeth to be almost towards the bark only, for if you cut the tree a little into the bark with a stone, it will come forth; if you pierce it deeper with a tool, it will be dry. The trees which have the moistest juices in their fruit, have commonly the moistest sap in their body, for the vines and pears are very moist; apples somewhat more spungy; the milk of the fig hath the quality of the rennet, to gather cheese; and so have certain sour herbs wherewith they make cheese in Lent.

658. The timber and wood are in some trees

more clean, in some more knotty, and it is a good trial to try it by speaking at one end, and laying the ear at the other: for if it be knotty, the voice will not pass well. Some have the veins more varied and chambletted, as oak, whereof wainscot is made; maple, whereof trenchers are made: some more smooth, as fir and walnut: some do more easily breed worms and spiders, some more hardly, as it is said of Irish trees: besides there be a number of differences that concern their use; as oak, cedar, and chestnut are the best builders; some are best for plough-timber, as ash; some for piers, that are sometimes wet and sometimes dry, as elm; some for planchers, as deal; some for tables, cupboards, and desks, as walnut; some for ship timber, as oaks that grow in moist grounds, for that maketh the timber tough, and not apt to rift with ordnance; wherein English and Irish timber are thought to excel: some for masts of ships, as fir and pine, because of their length, straightness, and lightness: some for pale, as oak; some for fuel, as ash, and so of the rest.

659. The coming of trees and plants in certain regions, and not in others, is sometimes casual: for many have been translated, and have prospered well; as damask-roses, that have not been known in England above a hundred years, and now are so common. But the liking of plants in certain soils more than in others is merely natural, as the fir and pine love the mountains; the poplar, willow, sallow, and alder, love rivers and moist places; the ash loveth coppices, but is best in standards alone; juniper loveth chalk, and so do most fruit trees; samphire groweth but upon rocks; reeds and osiers grow where they are washed with water; the vine loveth sides of hills, turning upon the south-east sun, &c.

660. The putting forth of certain herbs discovereth of what nature the ground where they put forth is, as wild thyme showeth good feeding-ground for cattle; betony and strawberries show grounds fit for wood; camomile showeth mellow grounds fit for wheat. Mustard-seed growing after the plough, showeth a good strong ground also for wheat: burnet showeth good meadow, and the like.

661. There are found in divers countries, some other plants that grow out of trees and plants, besides misseltoe: as in Syria there is an herb called cassytas, that groweth out of tall trees, and windeth itself about the same tree where it groweth, and sometimes about thorns. There is a kind of polypode that groweth out of trees, though it windeth not. So likewise an herb called faunos, upon the wild olive. And an herb called hippophæston upon the fuller's thorns: which, they say, is good for the falling sickness.

662. It hath been observed by some of the ancients, that howsoever cold and easterly winds are thought to be great enemies to fruit, yet nevertheless south winds are also found to do hurt, especially in the blossoming time, and the more if showers follow. It seemeth they call forth the moisture too fast. The west winds are the best. It hath been observed also, that green and open winters do hurt trees, insomuch as if two or three such winters come together, almond-trees and some other trees will die. The cause is the same with the former, because the lust of the earth over-spendeth itself: howsoever some other of the ancients have commended warm winters.

663. Snows lying long cause a fruitful year; for first they keep in the strength of the earth; secondly, they water the earth better than rain: for, in snow, the earth doth, as it were, suck the water as out of the teat: thirdly, the moisture of snow is the finest moisture, for it is the froth of the cloudy waters.

664. Showers, if they come a little before the ripening of fruits, do good to all succulent and moist fruits; as vines, olives, pomegranates; yet it is rather for plenty than for goodness; for the best wines are in the driest vintages: small showers are likewise good for corn, so as parching heats come not upon them. Generally night showers are better than day showers, for that the sun followeth not so fast upon them; and we see even in watering by the hand, it is best in summer time to water in the evening.

665. The differences of earths, and the trial of them, are worthy to be diligently inquired. The earth, that with showers doth easiliest soften, is commended; and yet some earth of that kind will be very dry and hard before the showers. The earth that casteth up from the plough a great clod, is not so good as that which casteth up a smaller clod. The earth that putteth forth moss easily, and may be called mouldy, is not good. The earth that smelleth well upon the digging, or ploughing, is commended, as containing the juice of vegetables almost already prepared. It is thought by some, that the ends of low rainbows fall more upon one kind of earth than upon another, as it may well be; for that that earth is most roscid: and therefore it is commended for a sign of good earth. The poorness of the herbs, it is plain, show the poorness of the earth; and especially if they be in colour more dark: but if the herbs show withered or blasted at the top, it showeth the earth to be very cold; and so doth the mossiness of trees. The earth, whereof the grass is soon parched with the sun, and toasted, is commonly forced earth, and barren in its own nature. The tender chessome, and mellow earth is the best, being mere mould, between the two extremes of clay and sand, especially if it be not loamy and binding. The earth, that after rain will scarce be ploughed, is commonly fruitful: for it is cleaving and full of juice.

666. It is strange, which is observed by some

of the ancients, that dust helpeth the fruitfulness of trees, and of vines by name; insomuch as they cast dust upon them of purpose. It should seem, that that powdering, when a shower cometh, maketh a kind of soiling to the tree, being earth and water finely laid on. And they note, that countries where the fields and ways are dusty bear the best vines.

667. It is commended by the ancients for an excellent help to trees, to lay the stalks and leaves of lupins about the roots, or to plough them into the ground where you will sow corn. The burning also of the cuttings of vines, and casting them upon land, doth much good. And it was generally received of old, that dunging of grounds when the west wind bloweth, and in the decrease of the moon, doth greatly help; the earth, as it seemeth, being then more thirsty and open to receive the dung.

668. The grafting of vines upon vines, as I take it, is not now in use: the ancients had it, and that three ways; the first was incision, which is the ordinary manner of grafting: the second was terebration through the middle of the stock, and putting in the cions there: and the third was pairing of two vines that grow together to the marrow, and binding them close.

669. The disease and ill accidents of corn are worthy to be inquired; and would be more worthy to be inquired, if it were in men's power to help them, whereas many of them are not to be remedied. The mildew is one of the greatest, which, out of question, cometh by closeness of air; and therefore in hills, or large champaign grounds, it seldom cometh; such as is with us York's woald. This cannot be remedied, otherwise than that in countries of small enclosure the ground be turned into larger fields: which I have known to do good in some farms. Another disease is the putting forth of wild oats, whereinto corn oftentimes, especially barley, doth degenerate. It happeneth chiefly from the weakness of the grain that is sown; for if it be either too old or mouldy, it will bring forth wild oats. Another disease is the satiety of the ground; for if you sow one ground still with the same corn, I mean not the same corn that grew upon the same ground, but the same kind of grain, as wheat, barley, &c. it will prosper but poorly: therefore besides the resting of the ground, you must vary the seed. Another ill accident is from the winds, which hurt at two times; at the flowering, by shaking off the flowers, and at the full ripening, by shaking out the corn. Another ill accident is drought, at the spindling of the corn, which with us is rare, but in hotter countries common; insomuch as the word calamitas was first derived from calamus, when the corn could not get out of the stalk. Another ill accident is over-wet at sowing time, which with us breedeth much dearth, insomuch as the corn never cometh up; and many times they are forced to resow summer corn where they sowed winter corn. Another ill accident is bitter frosts continued without snow, especially in the beginning of the winter, after the seed is new sown. Another disease is worms, which sometimes breed in the root, and happen upon hot suns and showers immediately after the sowing; and another worm breedeth in the ear itself, especially when hot suns break often out of clouds. Another disease is weeds, and they are such as either choke and over-shadow the corn, and bear it down, or starve the corn, and deceive it of nourishment. Another disease is over-rankness of the corn; which they use to remedy by mowing it after it is come up, or putting sheep into it. Another ill accident is laying of corn with great rains, near or in harvest. Another ill accident is, if the seed happen to have touched oil, or any thing that is fat; for those substances have an antipathy with nourishment of water.

670. The remedies of the diseases of corn have been observed as followeth. The steeping of the grain, before sowing, a little time in wine, is thought a preservative: the mingling of seed corn with ashes is thought to be good: the sowing at the wane of the moon is thought to make the corn sound: it hath not been practised, but it is thought to be of use to make some miscellane in corn, as if you sow a few beans with wheat, your wheat will be the better. It hath been observed that the sowing of corn with housleek doth good. Though grain that toucheth oil or fat receiveth hurt, yet the steeping of it in the dregs of oil, when it beginneth to putrefy, which they call amurca, is thought to assure it against worms. It is reported also, that if corn be mowed, it will make the grain longer, but emptier, and having more of the husk.

671. It hath been noted, that seed of a year old is the best, and of two or three years is worse, and that which is more old is quite barren; though, no doubt, some seeds and grains last better than others. The corn which in the vanning lieth lowest is the best; and the corn which broken or bitten retaineth a little yellowness, is better than that which is very white.

672. It hath been observed, that of all roots of herbs, the root of sorrel goeth the farthest into the earth; insomuch that it hath been known to go three cubits deep: and that it is the root that continueth fit longest to be set again, of any root that groweth. It is a cold and acid herb, that, as it seemeth loveth the earth, and is not much drawn by the sun.

673. It hath been observed, that some herbs like best being watered with salt water: as radish, beet, rue, pennyroyal; this trial would be extended to some other herbs; especially such as are strong, as tarragon, mustard-seed, rocket, and the like.

674. It is strange that is generally received,

how some poisonous beasts affect odorate and wholesome herbs; as that the snake loveth fennel; that the toad will be much under sage; that frogs will be in cinque-foil. It may be it is rather the shade, or other coverture, that they take liking in than the virtue of the herb.

675. It were a matter of great profit, save that I doubt it is too conjectural to venture upon, if one could discern what corn, herbs, or fruits, are like to be in plenty or scarcity, by some signs and prognostic in the beginning of the year: for as for those that are like to be in plenty, they may be bargained for upon the ground: as the old relation was of Thales, who, to show how easy it was for a philosopher to be rich, when he foresaw a great plenty of olives, made a monoply of them. And for scarcity, men may make profit in keeping better the old store. Long continuance of snow is believed to make a fruitful year of corn; an early winter, or a very late winter, a barren year of corn: an open and serene winter, an ill year of fruit, in these we have partly touched before: but other prognostics of like nature are diligently to be inquired.

676. There seem to be in some plants singularities, wherein they differ from all other: the olive hath the oily part only on the outside; whereas all other fruits have it in the nut or kernel. The fir hath, in effect, no stone, nut, or kernel, except you will count the little grains kernels. The pomegranate and pine-apple have only amongst fruits grains distinct in several cells. No herbs have curled leaves but cabbage and cabbage-lettuce. None have doubled leaves, one belonging to the stalk, another to the fruit or seed, but the artichoke. No flower hath that kind of spread that the woodbine hath. This may be a large field of contemplation; for it showeth that in the frame of nature, there is, in the producing of some species, a composition of matter, which happeneth oft, and may be much diversified: in others, such as happeneth rarely, and admitteth little variety: for so it is likewise in beasts: dogs have a resemblance with wolves and foxes; horses with asses, kine with buffles, hares with coneys, &c. And so in birds: kites and kestrels have a resemblance with hawks; common doves with ring-doves and turtles; blackbirds with thrushes and mavises; crows with ravens, daws, and choughs, &c. But elephants and swine amongst beasts; and the bird of paradise and the peacock amongst birds; and some few others, have scarce any other species that have affinity with them.

We leave the description of plants, and their virtues, to herbals, and other like books of natural history, wherein men's diligence hath been great, even to curiosity: for our experiments are only such as do ever ascend a degree to the deriving of causes, and extracting of axioms, which we are not ignorant but that some both of the ancient and modern writers have also laboured; but their causes and axioms are so full of imagination, and so infected with the old received theories, as they are mere inquinations of experience, and concoct it not.

Experiment solitary touching healing of wounds.

677. It hath been observed by some of the ancients, that skins, and especially of rams, newly pulled off, and applied to the wounds of stripes, do keep them from swelling and exulcerating, and likewise heal them and close them up; and that the whites of eggs do the same. The cause is a temperate conglutination, for both bodies are clammy and viscous, and do bridle the deflux of humours to the hurts, without penning them in too much.

Experiment solitary touching fat diffused in flesh.

678. You may turn almost all flesh into a fatty substance, if you take flesh and cut it into pieces, and put the pieces into a glass covered with parchment, and so let the glass stand six or seven hours in boiling water. It may be an experiment of profit for making of fat or grease for many uses; but then it must be of such flesh as is not edible; as horses, dogs, bears, foxes, badgers, &c.

Experiment solitary touching ripening of drink before the time.

679. It is reported by one of the ancients, that new wine put into vessels well stopped, and the vessels let down into the sea, will accelerate very much the making of them ripe and potable. The same would be tried in wort.

Experiment solitary touching pilosity and plumage.

680. Beasts are more hairy than men, and savage men more than civil, and the plumage of birds exceedeth the pilosity of beasts. The cause of the smoothness in men is not any abundance of heat and moisture, though that indeed causeth pilosity: but there is requisite to pilosity, not so much heat and moisture, as excrementitious heat and moisture; for whatsoever assimilateth, goeth not into the hair, and excrementitious moisture aboundeth most in beasts, and men that are more savage. Much the same reason is there of the plumage of birds, for birds assimilate less, and excern more than beasts, for their excrements are ever liquid, and their flesh generally more dry; besides, they have not instruments for urine; and so all the excrementitious moisture goeth into the feathers; and therefore it is no marvel though birds be commonly better meat than beasts, because their flesh doth assimilate more finely, and secerneth more subtilly. Again, the head of man hath hair upon the first birth, which no other part of the body hath. The cause may be want of

perspiration; for much of the matter of hair, in the other parts of the body, goeth forth by insensible perspiration; and besides, the skull being of a more solid substance, nourisheth and assimilateth less, and excerneth more, and so likewise doth the chin. We see also, that hair cometh not upon the palms of the hands, nor soles of the feet; which are parts more perspirable. And children likewise are not hairy, for that their skins are more perspirable.

Experiment solitary touching the quickness of motion in birds.

681. Birds are of swifter motion than beasts; for the flight of many birds is swifter than the race of many beasts. The cause is, for that the spirits in birds are in greater proportion, in comparison of the bulk of their body, than in beasts; for as for the reason that some give, that they are partly carried, whereas beasts go, that is nothing, for by that reason swimming should be swifter than running: and that kind of carriage also is not without labour of the wing.

Experiment solitary touching the different clearness of the sea.

682. The sea is clearer when the north wind bloweth than when the south wind. The cause is, for that salt water hath a little oiliness in the surface thereof, as appeareth in very hot days; and again, for that the southern wind relaxeth the water somewhat; as no water boiling is so clear as cold water.

Experiment solitary touching the different heats of fire and boiling water.

683. Fire burneth wood, making it first luminous, then black and brittle, and lastly, broken and incinerate: scalding water doth none of these. The cause is, for that by fire the spirit of the body is first refined, and then emitted; whereof the refining or attenuation causeth the light, and the emission, first the fragility, and after the dissolution into ashes; neither doth any other body enter: but in water the spirit of the body is not refined so much; and besides, part of the water entereth, which doth increase the spirit, and in a degree extinguish it: therefore we see that hot water will quench fire. And again we see, that in bodies wherein the water doth not much enter, but only the heat passeth, hot water worketh the effects of fire, as in eggs boiled and roasted, into which the water entereth not at all, there is scarce difference to be discerned, but in fruit and flesh, whereinto the water entereth in some part, there is much more difference.

Experiment solitary touching the qualification of heat by moisture.

684. The bottom of a vessel of boiling water, as hath been observed, is not very much heated, so as men may put their hand under the vessel and remove it. The cause is, for that the moisture of water as it quencheth coals where it entereth, so it doth allay heat where it toucheth: and therefore note well, that moisture, although it doth not pass through bodies, without communication of some substance, as heat and cold do, yet it worketh manifest effects; not by entrance of the body, but by qualifying of the heat and cold; as we see in this instance: and we see likewise, that the water of things distilled in water, which they call the bath, differeth not much from the water of things distilled by fire. We see also, that pewter dishes with water in them will not melt easily, but without it they will; nay, we see more, that butter, or oil, which in themselves are inflammable, yet by virtue of their moisture will do the like.

Experiment solitary touching yawning.

685. It hath been noted by the ancients, that it is dangerous to pick one's ear whilst he yawneth. The cause is, for that in yawning the inner parchment of the ear is extended, by the drawing in of the spirit and breath; for in yawning and sighing both, the spirit is first strongly drawn in, and then strongly expelled.

Experiment solitary touching the hiccough.

686. It hath been observed by the ancients, that sneezing doth cease the hiccough. The cause is, for that the motion of the hiccough is a lifting up of the stomach, which sneezing doth somewhat depress, and divert the motion another way. For first we see that the hiccough cometh of fulness of meat, especially in children, which causeth an extension of the stomach: we see also it is caused by acid meats, or drinks, which is by the pricking of the stomach; and the motion is ceased either by diversion, or by detention of the spirits; diversion, as in sneezing; detention, as we see holding of the breath doth help somewhat to cease the hiccough; and putting a man into an earnest study doth the like, as is commonly used: and vinegar put to the nostrils, or gargarized, doth it also; for that it is astringent, and inhibiteth the motion of the spirits.

Experiment solitary touching sneezing.

687. Looking against the sun doth induce sneezing. The cause is, not the heating of the nostrils, for then the holding up of the nostrils against the sun, though one wink, would do it; but the drawing down of the moisture of the brain; for it will make the eyes run with water; and the drawing of moisture to the eyes doth draw it to the nostrils by motion of consent; and so followeth sneezing; as contrariwise, the tickling of the nostrils within doth draw the moisture to the nostrils, and to the eyes by con-

sent; for they also will water. But yet it hath been observed, that if one be about to sneeze, the rubbing of the eyes till they run with water will prevent it. Whereof the cause is, for that the humour which was descending to the nostrils, is diverted to the eyes.

Experiment solitary touching the tenderness of the teeth.

688. The teeth are more by cold drink, or the like, affected than the other parts. The cause is double; the one, for that the resistance of bone to cold is greater than of flesh, for that the flesh shrinketh, but the bone resisteth, whereby the cold becometh more eager: the other is, for that the teeth are parts without blood; whereas blood helpeth to qualify the cold: and therefore we see that the sinews are much affected with cold, for that they are parts without blood; so the bones in sharp colds wax brittle: and therefore it hath been seen, that all contusions of bones in hard weather are more difficult to cure.

Experiment solitary touching the tongue.

689. It hath been noted, that the tongue receiveth more easily tokens of diseases than the other parts, as of heats within, which appear most in the blackness of the tongue. Again, pyed cattle are spotted in their tongues, &c. The cause is, no doubt, the tenderness of the part, which whereby receiveth more easily all alterations, than any other parts of the flesh.

Experiment solitary touching the taste.

690. When the mouth is out of taste, it maketh things taste sometimes salt, chiefly bitter, and sometimes loathsome, but never sweet. The cause is, the corrupting of the moisture about the tongue, which many times turneth bitter, and salt, and loathsome; but sweet never: for the rest are degrees of corruption.

Experiment solitary touching some prognostics of pestilential seasons.

691. It was observed in the great plague of the last year, that there were seen, in divers ditches and low grounds about London, many toads that had tails two or three inches long at the least; whereas toads usually have no tails at all. Which argueth a great disposition to putrefaction in the soil and air. It is reported likewise, that roots, such as carrots and parsnips, are more sweet and luscious in infectious years than in other years.

Experiment solitary touching special simples for medicines.

692. Wise physicians should with all diligence inquire what simples nature yieldeth that have extreme subtile parts, without any mordication or acrimony: for they undermine that which is hard, they open that which is stopped and shut, and they expel that which is offensive gently, without too much perturbation. Of this kind are elder-flowers, which therefore are proper for the stone: of this kind is the dwarf-pine, which is proper for the jaundice: of this kind is hartshorn, which is proper for agues and infections: of this kind is piony, which is proper for stoppings in the head: of this kind is fumitory, which is proper for the spleen: and a number of others. Generally, divers creatures bred of putrefaction, though they be somewhat loathsome to take, are of this kind, as earth-worms, timber-sows, snails, &c. And I conceive that the trochisks of vipers, which are so much magnified, and the flesh of snakes some ways condited and corrected, which of late are grown into some credit, are of the same nature. So the parts of beasts putrefied, as castoreum and musk, which have extreme subtile parts, are to be placed amongst them. We see also, that putrefactions of plants, as agaric and Jews-ear are of greatest virtue. The cause is, for that putrefaction is the subtilest of all motions in the parts of bodies; and since we cannot take down the lives of living creatures, which some of the Paracelsians say, if they could be taken down, would make us immortal; the next is for subtilty of operation, to take bodies putrefied, such as may be safely taken.

Experiments in consort touching Venus.

693. It hath been observed by the ancients, that much use of Venus doth dim the sight: and yet eunuchs which are unable to generate, are nevertheless also dim-sighted. The cause of dimness of sight in the former, is the expense of spirits; in the latter, the over-moisture of the brain: for the over-moisture of the brain doth thicken the spirits visual, and obstructeth their passages, as we see by the decay in the sight in age, where also the diminution of the spirits concurreth as another cause: we see also that blindness cometh by rheums and cataracts. Now in eunuchs, there are all the notes of moisture, as the swelling of their thighs, the looseness of their belly, the smoothness of their skin, &c.

694. The pleasure of the act of Venus is the greatest of the pleasures of the senses: the matching of it with itch is improper, though that also be pleasing to the touch. But the causes are profound. First, all the organs of the senses qualify the motions of the spirits, and make so many several species of motions, and pleasures or displeasures thereupon, as there be diversities of organs. The instruments of sight, hearing, taste, and smell, are of several frame, and so are the parts for generation. Therefore Scaliger doth well to make the pleasure of generation a sixth sense; and if there were any other differing organs, and qualified perforations for the spirits to pass, there would be more than the five senses

neither do we well know whether some beasts and birds have not senses that we know not; and the very scent of dogs is almost a sense by itself. Secondly, the pleasures of the touch are greater and deeper than those of the other senses; as we see in warming upon cold; or refrigeration upon heat: for as the pains of the touch are greater than the offences of other senses; so likewise are the pleasures. It is true that the affecting of the spirits immediately, and, as it were, without an organ, is of the greatest pleasure, which is but in two things; sweet smells and wine, and the like sweet vapours. For smells, we see their great and sudden effect in fetching men again when they swoon: for drink, it is certain that the pleasure of drunkenness is next the pleasure of Venus; and great joys likewise make the spirits move and touch themselves: and the pleasure of Venus is somewhat of the same kind.

695. It hath been always observed that men are more inclined to Venus in the winter, and women in the summer. The cause is, for that the spirits, in a body more hot and dry, as the spirits of men are, by the summer are more exhaled and dissipated; and in the winter more condensed and kept entire; but in bodies that are cold and moist as women's are, the summer doth cherish the spirits, and calleth them forth; the winter doth dull them. Furthermore, the abstinence, or intermission of the use of Venus in moist and well habituate bodies, breedeth a number of diseases: and especially dangerous imposthumations. The reason is evident; for that it is a principal evacuation, especially of the spirits; for of the spirits there is scarce any evacuation, but in Venus and exercise. And therefore the omission of either of them breedeth all diseases of repletion.

Experiments in consort touching the insecta.

The nature of vivification is very worthy the inquiry: and as the nature of things is commonly better perceived in small than in great; and in imperfect than in perfect; and in parts than in whole; so the nature of vivification is best inquired in creatures bred of putrefaction. The contemplation whereof hath many excellent fruits. First, in disclosing the original vivification. Secondly, in disclosing the original of figuration. Thirdly, in disclosing many things in the nature of perfect creatures, which in them lie more hidden. And fourthly, in traducing, by way of operation, some observations on the insecta, to work effects upon perfect creatures. Note, that the word insecta agreeth not with the matter, but we ever use it for brevity's sake, intending by it creatures bred of putrefaction.

696. The insecta are found to breed out of several matters: some breed of mud or dung; as the earthworms, eels, snakes, &c. For they are both putrefactions: for water in mud doth putrefy, as not able to preserve itself; and for dung, all excrements are the refuse and putrefaction of nourishment. Some breed in wood, both growing and cut down. *Query*, in what woods most, and at what seasons? We see that the worms with many feet, which round themselves into balls, are bred chiefly under logs of timber, but not in the timber; and they are said to be found also many times in gardens, where no logs are. But it seemeth their generation requireth a coverture, both from sun and rain or dew, as the timber is; and therefore they are not venemous, but contrariwise are held by the physicians to clarify the blood. It is observed also, that cimices are found in the holes of bedsides. Some breed in the hair of living creatures, as lice and tikes; which are bred by the sweat close kept, and somewhat arefied by the hair. The excrements of living creatures do not only breed insecta when they are excerned, but also while they are in the body; as in worms, whereto children are most subject, and are chiefly in the guts. And it hath been lately observed by physicians, that in many pestilent diseases, there are worms found in the upper parts of the body, where excrements are not, but only humours putrefied. Fleas breed principally of straw or mats, where there hath been little moisture; or the chamber and bedstraw kept close and not aired. It is received that they are killed by strewing wormwood in the rooms. And it is truly observed, that bitter things are apt rather to kill, than engender putrefaction; and they be things that are fat or sweet that are aptest to putrefy. There is a worm that breedeth in meal, of the shape of a large white maggot, which is given as a great dainty to nightingales. The moth breedeth upon cloth and other lanifices; especially if they be laid up dankish and wet. It delighteth to be about the flame of a candle. There is a worm called a wevil, bred under ground, and that feedeth upon roots: as parsnips, carrots, &c. Some breed in waters, especially shaded, but they must be standing waters; as the water-spider that hath six legs. The fly called the gad-fly, breedeth of somewhat that swimmeth upon the top of the water, and is most about ponds. There is a worm that breedeth of the dregs of wine decayed; which afterwards, as is observed by some of the ancients, turneth into a gnat. It hath been observed by the ancients, that there is a worm that breedeth in old snow, and is of colour reddish, and dull of motion, and dieth soon after it cometh out of the snow. Which should show, that snow hath in it a secret warmth; for else it could hardly vivify. And the reason of the dying of the worm, may be the sudden exhaling of that little spirit, as soon as it cometh out of the cold, which had shut it in. For as butterflies quicken with heat, which were benumbed with cold; so spirits may exhale with heat, which were preserved in cold. It is affirmed both by the ancient and modern

observation, that in furnaces of copper and brass, where chalcites, which is vitriol, is often cast in to mend the working, there riseth suddenly a fly, which sometimes moveth as if it took hold of the walls of the furnace: sometimes is seen moving in the fire below; and dieth presently as soon as it is out of the furnace: which is a noble instance, and worthy to be weighed; for it showeth, that as well violent heat of fire, as the gentle heat of living creatures, will vivify, if it have matter proportionable. Now the great axiom of vivification is, that there must be heat to dilate the spirit of the body; an active spirit to be dilated; matter viscous or tenacious to hold in the spirit; and that matter to be put forth and figured. Now a spirit dilated by so ardent a fire as that of the furnace, as soon as ever it cooleth never so little, congealeth presently. And, no doubt, this action is furthered by the chalcites, which hath a spirit that will put forth and germinate, as we see in chymical trials. Briefly, most things putrefied bring forth insecta of several names; but we will not take upon us now to enumerate them all.

697. The insecta have been noted by the ancients to feed little: but this hath not been diligently observed; for grasshoppers eat up the green of whole countries; and silk-worms devour leaves swiftly; and ants make great provision. It is true, that creatures that sleep and rest much, eat little; as dormice and bats, &c. They are all without blood: which may be, for that the juice of their bodies is almost all one; not blood, and flesh, and skin, and bone, as in perfect creatures; the integral parts have extreme variety, but the similar parts little. It is true, that they have, some of them, a diaphragm and an intestine; and they have all skins; which in most of the insecta are cast often. They are not generally of long life; yet bees have been known to live seven years; and snakes are thought, the rather for the casting of their spoil, to live till they be old: and eels, which many times breed of putrefaction, will live and grow very long: and those that interchange from worms to flies in the summer, and from flies to worms in the winter, have been kept in boxes four years at the least. Yet there are certain flies that are called ephemera that live but a day. The cause is the exility of the spirit, or perhaps the absence of the sun; for that if they were brought in, or kept close, they might live longer. Many of the insecta, as butterflies and other flies, revive easily when they seem dead, being brought to the sun or fire. The cause whereof is the diffusion of the vital spirit, and the easy dilating of it by a little heat. They stir a good while after their heads are off, or that they be cut in pieces; which is caused also, for that their vital spirits are more diffused throughout all their parts, and less confined to organs than in perfect creatures.

698. The insecta have voluntary motion, and therefore imagination; and whereas some of the ancients have said, that their motion is indeterminate, and their imagination indefinite, it is negligently observed; for ants go right forward to their hills, and bees do admirably know the way from a flowery heath two or three miles off to their hives. It may be, gnats and flies have their imagination more mutable and giddy, as small birds likewise have. It is said by some of the ancients, that they have only the sense of feeling, which is manifestly untrue: for if they go forth right to a place, they must needs have sight; besides, they delight more in one flower or herb than in another, and therefore have taste: and bees are called with sound upon brass, and therefore they have hearing; which showeth likewise, that though their spirit be diffused, yet there is a seat of their senses in their head.

Other observations concerning the insecta, together with the enumeration of them, we refer to that place, where we mean to handle the title of animals in general.

Experiment solitary touching leaping.

699. A man leapeth better with weights in his hands than without. The cause is, for that the weight, if it be proportionable, strengtheneth the sinews by contracting them. For otherwise, where no contraction is needful, weight hindereth. As we see in horse-races, men are curious to foresee, that there be not the least weight upon the one horse more than upon the other. In leaping with weights the arms are first cast backwards, and then forwards, with so much the greater force; for the hands go backward before they take their rise. *Query*, if the contrary motion of the spirits, immediately before the motion we intend, doth not cause the spirits as it were to break forth with more force? as breath also, drawn and kept in, cometh forth more forcibly: and in casting of any thing, the arms, to make a greater swing, are first cast backward.

Experiment solitary touching the pleasures and displeasures of the senses, especially of hearing.

700. Of musical tones and unequal sounds we have spoken before; but touching the pleasure and displeasure of the senses, not so fully. Harsh sounds, as of a saw when it is sharpened; grinding of one stone against another; squeaking or shrieking noise; make a shivering or horror in the body, and set the teeth on edge. The cause is, for that the objects of the ear do affect the spirits, immediately, most with pleasure and offence. We see there is no colour that affecteth the eye much with displeasure: there be sights that are horrible, because they excite the memory of things that are odious or fearful; but the same things painted do little affect. As for smells, tastes, and touches, they be things that do affect by a participation or impulsion of the

body of the object. So it is sound alone that doth immediately and incorporeally affect most; this is most manifest in music, and concords and discords in music; for all sounds, whether they be sharp or flat, if they be sweet, have a roundness and equality; and if they be harsh, are unequal; for a discord itself is but a harshness of divers sounds meeting. It is true that inequality not stayed upon, but passing, is rather an increase of sweetness; as in the purling of a wreathed string; and in the rascity of a trumpet; and in the nightingale-pipe of a regal; and in a discord straight falling upon a concord; but if you stay upon it, it is offensive: and therefore there be these three degrees of pleasing and displeasing in sounds, sweet sounds, discords, harsh sounds, which we call by divers names, as shrieking or grating, such as we now speak of. As for the setting of the teeth on edge, we see plainly what an intercourse there is between the teeth and the organ of the hearing, by the taking of the end of a bow between the teeth, and striking upon the string.

CENTURY VIII.

Experiment solitary touching veins of medicinal earth.

701. There be minerals and fossils in great variety; but of veins of earth medicinal, but few; the chief are, terra lemnia, terra sigillata communis, and bolus armenus; whereof terra lemnia is the chief. The virtues of them are, for curing of wounds, stanching of blood, stopping of fluxes, and rheums, and arresting the spreading of poison, infection, and putrefaction: and they have of all other simples the perfectest and purest quality of drying, with little or no mixture of any other quality. Yet it is true, that the bole-armoniac is the most cold of them, and that terra lemnia is the most hot, for which cause the island Lemnos, where it is digged, was in the old fabulous ages consecrated to Vulcan.

Experiment solitary touching the growth of sponges.

702. About the bottom of the Straits are gathered great quantities of sponges, which are gathered from the sides of rocks, being as it were a large but tough moss. It is the more to be noted, because that there be but few substances, plant-like, that grow deep within the sea; for they are gathered sometimes fifteen fathom deep: and when they are laid on shore, they seem to be of great bulk; but crushed together, will be transported in a very small room.

Experiment solitary touching sea-fish put in fresh waters.

703. It seemeth that fish that are used to the salt water do nevertheless delight more in fresh. We see, that salmons and smelts love to get into rivers, though it be against the stream. At the haven of Constantinople you shall have great quantities of fish that come from the Euxine sea, that when they come into the fresh water, do inebriate, and turn up their bellies, so as you may take them with your hand. I doubt there hath not been sufficient experiment made of putting sea-fish into fresh water ponds, and pools. It is a thing of great use and pleasure; for so you may have them new at some good distance from the sea: and besides, it may be, the fish will eat the pleasanter, and may fall to breed. And it is said, that Colchester oysters, which are put into pits, where the sea goeth and cometh, but yet so that there is a fresh water coming also to them when the sea voideth, become by that means fatter, and more grown.

Experiment solitary touching attraction by similitude of substance.

704. The Turkish bow giveth a very forcible shoot; insomuch as it hath been known, that the arrow hath pierced a steel target, or a piece of brass of two inches thick: but that which is more strange, the arrow, if it be headed with wood, hath been known to pierce through a piece of wood of eight inches thick. And it is certain, that we had in use at one time, for sea fight, short arrows, which they called sprights, without any other heads, save wood sharpened: which were discharged out of muskets, and would pierce through the sides of ships where a bullet would not pierce. But this dependeth upon one of the greatest secrets in all nature; which is, that similitude of substance will cause attraction, where the body is wholly freed from the motion of gravity: for if that were taken away, lead would draw lead, and gold would draw gold, and iron would draw iron, without the help of the loadstone. But this same motion of weight or gravity, which is a mere motion of the matter, and hath no affinity with the form or kind, doth kill the other motion, except itself be killed by a violent motion, as in these instances of arrows; for then the motion of attraction by similitude of substance beginneth to show itself. But we shall handle this point of nature fully in due place.

Experiment solitary touching certain drinks in Turkey.

705. They have in Turkey and the east certain confections, which they call servets, which are like to candied conserves, and are made of sugar

and lemons, or sugar and citrons, or sugar and violets, and some other flowers; and some mixture of amber for the more delicate persons: and those they dissolve in water, and therefore make their drink, because they are forbidden wine by their law. But I do much marvel, that no Englishman, or Dutchman, or German, doth set up brewing in Constantinople; considering they have such quantity of barley. For as for the general sort of men, frugality may be the cause of drinking water: for that it is no small saving to pay nothing for one's drink: but the better sort might well be at the cost. And yet I wonder the less at it, because I see France, Italy, or Spain, have not taken into use beer or ale; which, perhaps, if they did, would better both their healths and their complexions. It is likely it would be matter of great gain to any that should begin it in Turkey.

Experiments in consort touching sweat.

706. In bathing in hot water, sweat, nevertheless, cometh not in the parts under the water. The cause is; first, for that sweat is a kind of colliquation, and that kind of colliquation is not made either by an over-dry heat, or an over-moist heat: for over-moisture doth somewhat extinguish the heat, as we see that even hot water quencheth fire; and over-dry heat shutteth the pores: and therefore men will sooner sweat covered before the sun or fire, than if they stood naked: and earthen bottles, filled with hot water, do provoke in bed a sweat more daintily than brick-bats hot. Secondly, hot water doth cause evaporation from the skin; so as it spendeth the matter in those parts under the water, before it issueth in sweat. Again, sweat cometh more plentifully, if the heat be increased by degrees, than if it be greatest at first, or equal. The cause is, for that the pores are better opened by a gentle heat, than by a more violent; and by their opening, the sweat issueth more abundantly. And therefore physicians may do well when they provoke sweat in bed by bottles, with a decoction of sudorific herbs in hot water, to make two degrees of heat in the bottles; and to lay in the bed the less heated first, and after half an hour, the more heated.

707. Sweat is salt in taste; the cause is, for that that part of the nourishment which is fresh and sweet, turneth into blood and flesh: and the sweat is only that part which is separate and excerned. Blood also raw hath some saltness more than flesh: because the assimilation into flesh is not without a little and subtile excretion from the blood.

708. Sweat cometh forth more out of the upper parts of the body than the lower; the reason is, because those parts are more replenished with spirits; and the spirits are they that put forth sweat: besides, they are less fleshy, and sweat issueth, chiefly, out of the parts that are less fleshy, and more dry; as the forehead and breast.

709. Men sweat more in sleep than waking; and yet sleep doth rather stay other fluxions, than cause them; as rheums, looseness of the body, &c. The cause is, for that in sleep the heat and spirits do naturally move inwards, and there rest. But when they are collected once within, the heat becometh more violent and irritate; and thereby expelleth sweat.

710. Cold sweats are, many times, mortal, and near death: and always ill, and suspected: as in great fears, hypochondriacal passions, &c. The cause is, for that cold sweats come by a relaxation or forsaking of the spirits, whereby the moisture of the body, which heat did keep firm in the parts, severeth and issueth out.

711. In those diseases which cannot be discharged by sweat, sweat is ill, and rather to be stayed; as in diseases of the lungs, and fluxes of the belly: but in those diseases which are expelled by sweat, it easeth and lighteneth; as in agues, pestilences, &c. The cause is, for that sweat in the latter sort is partly critical, and sendeth forth the matter that offendeth: but in the former, it either proceedeth from the labour of the spirits, which showeth them oppressed; or from motion of consent, when nature, not able to expel the disease where it is seated, moveth to an expulsion indifferent over all the body.

Experiment solitary touching the glow-worm.

712. The nature of the glow-worm is hitherto not well observed. Thus much we see: that they breed chiefly in the hottest months of summer; and that they breed not in champain, but in bushes and hedges. Whereby it may be conceived, that the spirit of them is very fine, and not to be refined but by summer heats: and again, that by reason of the fineness, it doth easily exhale. In Italy, and the hotter countries, there is a fly they call lucciole, that shineth as the glow-worm doth; and it may be is the flying glow-worm. But that fly is chiefly upon fens and marshes. But yet the two former observations hold; for they are not seen but in the heat of summer; and sedge, or other green of the fens, give as good shade as bushes. It may be the glow-worms of the cold countries ripen not so far as to be winged.

Experiments in consort touching the impressions which the passions of the mind make upon the body.

713. The passions of the mind work upon the body the impressions following. Fear causeth paleness, trembling, the standing of the hair upright, starting, and shrieking. The paleness is caused, for that the blood runneth inward to succour the heart. The trembling is caused, for that through the flight of the spirits inward, the outward parts are destituted, and not sustained.

Standing upright of the hair is caused, for that by the shutting of the pores of the skin, the hair that lieth aslope must needs rise. Starting is both an apprehension of the thing feared, and in that kind it is a motion of shrinking, and likewise an inquisition in the beginning, what the matter should be, and in that kind it is a motion of erection, and therefore when a man would listen suddenly to any thing, he starteth; for the starting is an erection of the spirits to attend. Screeching is an appetite of expelling that which suddenly striketh the spirits: for it must be noted, that many motions, though they be unprofitable to expel that which hurteth, yet they are offers of nature, and cause motions by consent, as in groaning, or crying upon pain.

714. Grief and pain cause sighing, sobbing, groaning, screaming, and roaring; tears, distorting of the face, grinding of the teeth, sweating. Sighing is caused by the drawing in of a greater quantity of breath to refresh the heart that laboureth: like a great draught when one is thirsty. Sobbing is the same thing stronger. Groaning, and screaming, and roaring are caused by an appetite of expulsion, as hath been said: for when the spirits cannot expel the thing that hurteth, in their strife to do it, by motion of consent, they expel the voice. And this is when the spirits yield, and give over to resist: for if one do constantly resist pain, he will not groan. Tears are caused by a contraction of the spirits of the brain: which contraction by consequence astringeth the moisture of the brain, and thereby sendeth tears into the eyes. And this contraction or compression causeth also wringing of the hands; for wringing is a gesture of expression of moisture. The distorting of the face is caused by a contention, first to bear and resist, and then to expel; which maketh the parts knit first, and afterwards open. Grinding of the teeth is caused likewise, by a gathering and serring of the spirits together to resist, which maketh the teeth also to sit hard one against another. Sweating is also a compound motion, by the labour of the spirits, first to resist, and then to expel.

715. Joy causeth a cheerfulness and vigour in the eyes, singing, leaping, dancing, and sometimes tears. All these are the effects of the dilation and coming forth of the spirits into the outward parts; which maketh them more lively and stirring. We know it hath been seen, that excessive sudden joy hath caused present death, while the spirits did spread so much as they could not retire again. As for tears, they are the effects of compression of the moisture of the brain, upon dilatation of the spirits. For compression of the spirits worketh an expression of the moisture of the brain by consent, as hath been said in grief. But then in joy, it worketh it diversely, viz. by propulsion of the moisture, when the spirits dilate, and occupy more room.

716. Anger causeth paleness in some, and the going and coming of the colour in others: also trembling in some: swelling, foaming at the mouth, stamping, bending of the fist. Paleness, and going and coming of the colour, are caused by the burning of the spirits about the heart; which to refresh themselves, call in more spirits from the outward parts. And if the paleness be alone, without sending forth the colour again, it is commonly joined with some fear; but in many there is no paleness at all, but contrariwise redness about the cheeks and gills; which is by the sending forth of the spirits in an appetite to revenge. Trembling in anger is likewise by a calling in of the spirits; and is commonly when anger is joined with fear. Swelling is caused, both by a dilatation of the spirits by overheating, and by a liquefaction or boiling of the humours thereupon. Foaming at the mouth is from the same cause, being an ebullition. Stamping, and bending of the fist, are caused by an imagination of the act of revenge.

717. Light displeasure or dislike causeth shaking of the head, frowning and knitting of the brows. These effects arise from the same causes that trembling and horror do: namely, from the retiring of the spirits, but in a less degree. For the shaking of the head is but a slow and definite trembling; and is a gesture of slight refusal; and we see also, that a dislike causeth, often, that gesture of the hand, which we use when we refuse a thing, or warn it away. The frowning and knitting of the brows is a gathering, or serring of the spirits, to resist in some measure. And we see also this knitting of the brows will follow upon earnest studying, or cogitation of any thing, though it be without dislike.

718. Shame causeth blushing, and casting down of the eyes. Blushing is the resort of blood to the face; which in the passion of shame is the part that laboureth most. And although the blushing will be seen in the whole breast if it be naked, yet that is but in passage to the face. As for the casting down of the eyes, it proceedeth of the reverence a man beareth to other men; whereby, when he is ashamed, he cannot endure to look firmly upon others: and we see, that blushing, and the casting down of the eyes both, are more when we come before many; "ore Pompeii quid mollius? nunquam non coram pluribus erubuit:" and likewise when we come before great or reverend persons.

719. Pity causeth sometimes tears; and a flexion or cast of the eye aside. Tears come from the same cause that they do in grief: for pity is but grief in another's behalf. The cast of the eye is a gesture of aversion, or loathness to behold the object of pity.

720. Wonder causeth astonishment, or an immoveable posture of the body; casting up of the eyes to heaven, and lifting up of the hands. For

astonishment, it is caused by the fixing of the mind upon one object of cogitation, whereby it doth not spatiate and transcur, as it useth; for in wonder the spirits fly not, as in fear; but only settle, and are made less apt to move. As for the casting up of the eyes, and lifting up of the hands, it is a kind of appeal to the Deity, which is the author, by power and providence, of strange wonders.

721. Laughing causeth a dilatation of the mouth and lips; a continual expulsion of the breath, with the loud noise, which maketh the interjection of laughing; shaking of the breast and sides; running of the eyes with water, if it be violent and continued. Wherein first it is to be understood, that laughing is scarce properly a passion, but hath its source from the intellect; for in laughing there ever precedeth a conceit of somewhat ridiculous, and therefore it is proper to man. Secondly, that the cause of laughing is but a light touch of the spirits. And not so deep an impression as in other passions. And therefore, that which hath no affinity with the passions of the mind, it is moved, and that in great vehemency, only by tickling some parts of the body: and we see that men even in a grieved state of mind, yet cannot sometimes forbear laughing. Thirdly, it is ever joined with some degree of delight: and therefore exhilaration hath some affinity with joy, though it be a much lighter motion: "res severa est verum gaudium." Fourthly, that the object of it is deformity; absurdity, shrewd turns, and the like. Now to speak of the causes of the effects before mentioned whereunto these general notes give some light. For the dilatation of the mouth and lips, continued expulsion of the breath and voice, and shaking of the breast and sides, they proceed, all, from the dilatation of the spirits; especially being sudden. So likewise, the running of the eyes with water, as hath been formerly touched, where we spake of the tears of joy and grief, is an effect of dilatation of the spirits. And for suddenness, it is a great part of the matter: for we see, that any shrewd turn that lighteth upon another; or any deformity, &c., moveth laughter in the instant, which after a little time it doth not. So we cannot laugh at any thing after it is stale, but whilst it is new: and even in tickling, if you tickle the sides, and give warning, or give a hard or continued touch, it doth not move laughter so much.

722. Lust causeth a flagrancy in the eyes, and priapism. The cause of both these is, for that in lust, the sight and the touch are the things desired, and therefore the spirits resort to those parts which are most affected. And note well in general, for that great use may be made of the observation, that, evermore, the spirits in all passions, resort most to the parts that labour most, or are most affected. As in the last which hath been mentioned, they resort to the eyes and venerous parts: in fear and anger to the heart: in shame to the face: and in light dislikes to the head.

Experiments in consort touching drunkenness.

723. It hath been observed by the ancients, and is yet believed, that the sperm of drunken men is unfruitful. The cause is, for that it is over-moistened, and wanteth spissitude: and we have a merry saying, that they that go drunk to bed get daughters.

724. Drunken men are taken with a plain defect, or destitution in voluntary motion. They reel; they tremble; they cannot stand nor speak strongly. The cause is, for that the spirits of the wine oppress the spirits animal, and occupy part of the place where they are, and so make them weak to move. And therefore drunken men are apt to fall asleep: and opiates, and stupefactives, as poppy, henbane, hemlock, &c., induce a kind of drunkenness, by the grossness of their vapour, as wine doth by the quantity of the vapour. Besides, they rob the spirits animal of their matter, whereby they are nourished: for the spirits of the wine prey upon it as well as they: and so they make the spirits less supple and apt to move.

725. Drunken men imagine every thing turneth round: they imagine also that things come upon them: they see not well things afar off; those things that they see near hand, they see out of their place; and sometimes they see things double. The cause of the imagination that things turn round is, for that the spirits themselves turn, being compressed by the vapour of the wine, for any liquid body upon compression turneth, as we see in water, and it is all one to the sight, whether the visual spirits move, or the object moveth, or the medium moveth. And we see that long turning round breedeth the same imagination. The cause of the imagination that things come upon them is, for that the spirits visual themselves draw back; which maketh the object seem to come on; and besides, when they see things turn round and move, fear maketh them think they come upon them. The cause that they cannot see things afar off, is the weakness of the spirits; for in every megrim or vertigo there is an obtenebration joined with a semblance of turning round; which we see also in the lighter sort of swoonings. The cause of seeing things out of their place, is the refraction of the spirits visual; for the vapour is as an unequal medium; and it is as the sight of things out of place in water. The cause of seeing things double, is the swift and unquiet motion of the spirits, being oppressed, to and fro; for, as was said before, the motion of the spirits visual, and the motion of the object, make the same appearances; and for the swift motion of the object, we see that if you fillip a lute-string, it showeth double or treble.

726. Men are sooner drunk with small draughts than with great. And again, wine sugared ine

briateth less than wine pure. The cause of the former is, for that the wine descendeth not so fast to the bottom of the stomach, but maketh longer stay in the upper part of the stomach, and sendeth vapours faster to the head; and therefore inebriateth sooner. And for the same reason, sops in wine, quantity for quantity, inebriate more than wine of itself. The cause of the latter is, for that the sugar doth inspissate the spirits of the wine, and maketh them not so easy to resolve into vapour. Nay farther, it is thought to be some remedy against inebriating, if wine sugared be taken after wine pure. And the same effect is wrought either by oil or milk, taken upon much drinking.

Experiment solitary touching the help or hurt of wine, though moderately used.

727. The use of wine in dry and consumed bodies is hurtful; in moist and full bodies it is good. The cause is, for that the spirits of the wine do prey upon the dew or radical moisture, as they term it, of the body, and so deceive the animal spirits. But where there is moisture enough, or superfluous, there wine helpeth to digest, and desiccate the moisture.

Experiment solitary touching caterpillars.

728. The caterpillar is one of the most general of worms, and breedeth of dew and leaves; for we see infinite number of caterpillars which breed upon trees and hedges, by which the leaves of the trees or hedges are in great part consumed; as well by their breeding out of the leaf, as by their feeding upon the leaf. They breed in the spring chiefly, because then there is both dew and leaf. And they breed commonly when the east winds have much blown; the cause whereof is, the dryness of that wind; for to all vivification upon putrefaction, it is requisite the matter be not too moist: and therefore we see they have cobwebs about them, which is a sign of a slimy dryness; as we see upon the ground, whereupon, by dew and sun, cobwebs breed all over. We see also the green caterpillar breedeth in the inward parts of roses, especially not blown, where the dew sticketh; but especially caterpillars, both the greatest, and the most, breed upon cabbages, which have a fat leaf, and apt to putrefy. The caterpillar, towards the end of summer, waxeth volatile, and turneth to a butterfly, or perhaps some other fly. There is a caterpillar that hath a fur or down upon it, and seemeth to have affinity with the silk-worm.

Experiment solitary touching the flies cantharides.

729. The flies cantharides are bred of a worm or caterpillar, but peculiar to certain fruit-trees; as are the fig-tree, the pine-tree, and the wild brier; all which bear sweet fruit, and fruit that hath a kind of secret biting or sharpness: for the fig hath a milk in it that is sweet and corrosive; the pine-apple hath a kernel that is strong and abstersive: the fruit of the brier is said to make children, or those that eat them, scabbed. And therefore no marvel, though cantharides have such a corrosive and cauterising quality; for there is not any other of the insects, but is bred of a duller matter. The body of the cantharides is bright coloured; and it may be, that the delicate coloured dragon-flies may have likewise some corrosive quality.

Experiments in consort touching lassitude.

730. Lassitude is remedied by bathing, or anointing with oil and warm water. The cause is, for that all lassitude is a kind of contusion, and compression of the parts; and bathing and anointing give a relaxation or emollition; and the mixture of oil and water is better than either of them alone; because water entereth better into the pores, and oil after entry softeneth better. It is found also, that the taking of tobacco doth help and discharge lassitude. The reason whereof is, partly, because by cheering or comforting of the spirits, it openeth the parts compressed or contused; and chiefly because it refresheth the spirits by the opiate virtue thereof, and so dischargeth weariness, as sleep likewise doth.

731. In going up a hill, the knees will be most weary; in going down a hill, the thighs. The cause is, for that in the lift of the feet, when a man goeth up the hill, the weight of the body beareth most upon the knees; and in going down the hill, upon the thighs.

Experiment solitary touching the casting of the skin and shell in some creatures.

732. The casting of the skin is by the ancients compared to the breaking of the secundine, or caul, but not rightly: for that were to make every casting of the skin a new birth: and besides, the secundine is but a general cover, not shaped according to the parts, but the skin is shaped according to the parts. The creatures that cast their skin are, the snake, the viper, the grasshopper, the lizard, the silk-worm, &c. Those that cast their shell are, the lobster, the crab, the crawfish, the hodmandod or dedman, the tortoise, &c. The old skins are found, but the old shells never: so as it is like, they scale off, and crumble away by degrees. And they are known by the extreme tenderness and softness of the new shell, and somewhat by the freshness of the colour of it. The cause of the casting of skin and shell should seem to be the great quantity of matter in those creatures that is fit to make skin or shell; and again, the looseness of the skin or shell, that sticketh not close to the flesh. For it is certain, that it is the new skin or shell that putteth off the old: so we see, that in deer it is the young horn that putteth off the old; and in birds, the young feathers put off the old: and so birds that have

much matter for their beak, cast their beaks, the new beak putting off the old.

Experiments in consort touching the postures of the body.

733. Lying not erect, but hollow, which is in the making of the bed; or with the legs gathered up, which is in the posture of the body, is the more wholesome. The reason is, the better comforting of the stomach, which is by that less pensile: and we see that in weak stomachs, the laying up of the legs high, and the knees almost to the mouth, helpeth and comforteth. We see also, that galley-slaves, notwithstanding their misery otherwise, are commonly fat and fleshy; and the reason is, because the stomach is supported somewhat in sitting, and is pensile in standing or going. And therefore, for prolongation of life, it is good to choose these exercises where the limbs move more than the stomach and belly; as in rowing, and in sawing, being set.

734. Megrims and giddiness are rather when we rise after long sitting, than while we sit. The cause is, for that the vapours, which were gathered by sitting, by the sudden motion fly more up into the head.

735. Leaning long upon any part maketh it numb, and as we call it asleep. The cause is, for that the compression of the part suffereth not the spirits to have free access; and therefore when we come out of it, we feel a stinging or pricking, which is the re-entrance of the spirits.

Experiment solitary touching pestilential years.

736. It hath been noted, that those years are pestilential and unwholesome, when there are great numbers of frogs, flies, locusts, &c. The cause is plain; for that those creatures being engendered of putrefaction, when they abound, show a general disposition of the year, and constitution of the air, to diseases of putrefaction. And the same prognostic, as hath been said before, holdeth, if you find worms in oak-apples: for the constitution of the air appeareth more subtilly in any of these things, than to the sense of man.

Experiment solitary touching the prognostics of hard winters.

737. It is an observation amongst country people, that years of store of haws and hips do commonly portend cold winters; and they ascribe it to God's providence, that, as the Scripture saith, reacheth even to the falling of a sparrow; and much more is like to reach to the preservation of birds in such seasons. The natural cause also may be the want of heat, and abundance of moisture, in the summer precedent; which putteth forth those fruits, and must needs leave great quantity of cold vapours not dissipated; which causeth the cold of the winter following.

Experiment solitary, touching medicines that condense and relieve the spirits.

738. They have in Turkey a drink called coffee, made of a berry of the same name, as black as soot, and of a strong scent, but not aromatical; which they take, beaten into powder, in water, as hot as they can drink it: and they take it, and sit at it in their coffee-houses, which are like our taverns. This drink comforteth the brain and heart, and helpeth digestion. Certainly this berry coffee, the root and leaf beetle, the leaf tobacco, and the tear of poppy, opium, of which the Turks are great takers, supposing it expelleth all fear, do all condense the spirits, and make them strong and aleger. But it seemeth they are taken after several manners; for coffee and opium are taken down, tobacco but in smoke, and beetle is but champed in the mouth with a little lime. It is like there are more of them, if they were well found out, and well corrected. Query, of henbane-seed; of mandrake; of saffron, root and flower; of folium indum; of ambergrease; of the Assyrian amomum, if it may be had; and of the scarlet powder which they call kermes: and, generally, of all such things as do inebriate and provoke sleep. Note, that tobacco is not taken in root or seed, which are more forcible ever than leaves.

Experiment solitary touching paintings of the body.

739. The Turks have a black powder, made of a mineral called alcohol, which with a fine long pencil they lay under their eyelids, which doth colour them black; whereby the white of the eye is set off more white. With the same powder they colour also the hairs of their eyelids, and of their eyebrows, which they draw into embowed arches. You shall find that Xenophon maketh mention, that the Medes used to paint their eyes. The Turks use with the same tincture to colour the hair of their heads and beards black. And divers with us that are grown gray, and yet would appear young, find means to make their hair black, by combing it, as they say, with a leaden comb, or the like. As for the Chinesses, who are of an ill complexion, being olivaster, they paint their cheeks scarlet, especially their king and grandees. Generally, barbarous people, that go naked, do not only paint themselves, but they pounce and raise their skin, that the painting may not be taken forth; and make it into works. So do the West Indians; and so did the ancient Picts and Britons; so that it seemeth men would have the colours of birds' feathers, if they could tell how; or at least they will have gay skins instead of gay clothes.

Experiment solitary touching the use of bathing and anointing.

740. It is strange that the use of bathing, as a part of diet, is left. With the Romans and Gre

cians it was as usual as eating or sleeping; and so is it amongst the Turks at this day: whereas with us it remaineth but as a part of physic. I am of opinion, that the use of it, as it was with the Romans, was hurtful to health; for that it made the body soft, and easy to waste. For the Turks it is more proper, because that their drinking water and feeding upon rice, and other food of small nourishment, maketh their bodies so solid and hard, as you need not fear that bathing should make them frothy. Besides, the Turks are great sitters, and seldom walk, whereby they sweat less, and need bathing more. But yet certain it is that bathing, and especially anointing, may be so used as it may be a great help to health, and prolongation of life. But hereof we shall speak in due place, when we come to handle experiments medicinal.

Experiment solitary touching chambletting of paper.

741. The Turks have a pretty art of chambletting of paper, which is not with us in use. They take divers oiled colours, and put them severally, in drops, upon water, and stir the water lightly, and then wet their paper, being of some thickness, with it, and the paper will be waved and veined, like chamblet or marble.

Experiment solitary touching cuttle-ink.

742. It is somewhat strange, that the blood of all birds and beasts and fishes should be of a red colour, and only the blood of the cuttle should be as black as ink. A man would think, that the cause should be the high concoction of that blood; for we see in ordinary puddings, that the boiling turneth the blood to be black; and the cuttle is accounted a delicate meat, and much in request.

Experiment solitary touching increase of weight in earth.

743. It is reported of credit, that if you take earth from land adjoining to the river of Nile, and preserve it in that manner that it neither come to be wet nor wasted; and weigh it daily, it will not alter weight until the seventeenth of June, which is the day when the river beginneth to rise; and then it will grow more and more ponderous, till the river cometh to its height. Which if it be true, it cannot be caused but by the air, which then beginneth to condense; and so turneth within that small mould into a degree of moisture, which produceth weight. So it hath been observed, that tobacco, cut, and weighed, and then dried by the fire, loseth weight; and after being laid in the open air, recovereth weight again. And it should seem, that as soon as ever the river beginneth to increase, the whole body of the air thereabouts suffereth a change: for, that which is more strange, it is credibly affirmed, that upon that very day when the river first riseth, great plagues in Cairo use suddenly to break up.

Experiments in consort touching sleep.

744. Those that are very cold, and especially in their feet, cannot get to sleep: the cause may be, for that in sleep is required a free respiration, which cold doth shut in and hinder; for we see that in great colds, one can scarce draw his breath. Another cause may be, for that cold calleth the spirits to succour, and therefore they cannot so well close, and go together in the head, which is ever requisite to sleep. And for the same cause, pain and noise hinder sleep; and darkness, contrariwise, furthereth sleep.

745. Some noises, whereof we spake in the hundred and twelfth experiment, help sleep: as the blowing of the wind, the trickling of water, humming of bees, soft singing, reading, &c. The cause is, for that they move in the spirits a gentle attention; and whatsoever moveth attention without too much labour stilleth the natural and discursive motion of the spirits.

746. Sleep nourisheth, or at least preserveth bodies, a long time, without other nourishment. Beasts that sleep in winter, as it is noted of wild bears, during their sleep wax very fat, though they eat nothing. Bats have been found in ovens, and other hollow close places, matted one upon another: and therefore it is likely that they sleep in the winter time, and eat nothing. *Query*, whether bees do not sleep all winter, and spare their honey? Butterflies, and other flies, do not only sleep, but lie as dead all winter; and yet with a little heat of sun or fire, revive again. A dormouse, both winter and summer, will sleep some days together, and eat nothing.

Experiments in consort touching teeth and hard substances in the bodies of living creatures.

To restore teeth in age, were magnale naturæ. It may be thought of. But howsoever, the nature of the teeth deserveth to be inquired of, as well as the other parts of living creatures' bodies.

747. There be five parts in the bodies of living creatures, that are of hard substance; the skull, the teeth, the bones, the horns, and the nails. The greatest quantity of hard substance continued is towards the head. For there is the skull of one entire bone; there are the teeth; there are the maxillary bones; there is the hard bone that is the instrument of hearing; and thence issue the horns; so that the building of living creatures' bodies is like the building of a timber house, where the walls and other parts have columns and beams; but the roof is, in the better sort of houses, all tile, or lead, or stone. As for birds, they have three other hard substances proper to them; the bill, which is of like matter with the teeth: for no birds have teeth: the shell of the egg: and their quills: for as for their spur, it is

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but a nail. But no living creatures that have shells very hard, as oysters, cockles, muscles, scallops, crabs, lobsters, craw-fish, shrimps, and especially the tortoise, have bones within them, but only little gristles.

748. Bones, after full growth, continue at a stay; and so doth the skull: horns, in some creatures, are cast and renewed: teeth stand at a stay, except their wearing: as for nails, they grow continually: and bills and beaks will overgrow, and sometimes be cast, as in eagles and parrots.

749. Most of the hard substances fly to the extremes of the body: as skull, horns, teeth, nails, and beaks: only the bones are more inward, and clad with flesh. As for the entrails, they are all without bones: save that a bone is sometimes found in the heart of a stag; and it may be in some other creature.

750. The skull hath brains, as a kind of marrow, within it. The back-bone hath one kind of marrow, which hath an affinity with the brain; and other bones of the body have another. The jaw-bones have no marrow severed, but a little pulp of marrow diffused. Teeth likewise are thought to have a kind of marrow diffused, which causeth the sense and pain; but it is rather sinew: for marrow hath no sense, no more than blood. Horn is alike throughout; and so is the nail.

751. None other of the hard substances have sense, but the teeth; and the teeth have sense, not only of pain, but of cold.

But we will leave the inquiries of other hard substances unto their several places, and now inquire only of the teeth.

752. The teeth are, in men, of three kinds: sharp, as the fore-teeth: broad, as the back-teeth, which we call the molar-teeth, or grinders, and pointed teeth, or canine, which are between both. But there have been some men that have had their teeth undivided, as of one whole bone, with some litle mark in the place of the division, as Pyrrhus had. Some creatures have over-long or out-growing teeth, which we call fangs, or tusks: as boars, pikes, salmons, and dogs, though less. Some living creatures have teeth against teeth, as men and horses; and some have teeth, especially their master-teeth, indented one within another like saws, as lions; and so again have dogs. Some fishes have diverse rows of teeth in the roofs of their mouths, as pikes, salmons, trouts, &c. And many more in salt-waters. Snakes and other serpents have venomous teeth, which are sometimes mistaken for their sting.

753. No beast that hath horns hath upper teeth; and no beast that hath teeth above wanteth them below: but yet if they be of the same kind, it followeth not, that if the hard matter goeth not into upper teeth, it will go into horns, nor yet e converso; for does, that have no horns, have no upper teeth.

754. Horses have, at three years old, a tooth put forth, which they call the colt's tooth: and at four years old there cometh the mark tooth, which hath a hole as big as you may lay a pea within it, and that weareth shorter and shorter every year, till that at eight years old the tooth is smooth, and the hole gone: and then they say, that the mark is out of the horse's mouth.

755. The teeth of men breed first, when the child is about a year and half old: and then they cast them, and new come about seven years old. But divers have backward teeth come forth at twenty, yea some at thirty and forty. *Query*, of the manner of the coming of them forth. They tell a tale of the old Countess of Desmond, who lived till she was seven-score years old, that she did dentire twice or thrice, casting her old teeth, and others coming in their place.

756. Teeth are much hurt by sweetmeats; and by painting with mercury; and by things over-hot; and by things over-cold; and by rheums. And the pain of the teeth is one of the sharpest of pains.

757. Concerning teeth, these things are to be considered. 1. The preserving of them. 2. The keeping of them white. 3. The drawing of them with least pain. 4. The staying and easing of the tooth-ache. 5. The binding in of artificial teeth, where teeth have been strucken out. 6. And last of all, that great one of restoring teeth in age. The instances that give any likelihood of restoring teeth in age, are the late coming of teeth in some, and the renewing of the beaks in birds, which are commaterial with teeth. *Query*, therefore, more particularly how that cometh. And again, the renewing of horns. But yet that hath not been known to have been provoked by art; therefore let trial be made, whether horns may be procured to grow in beasts that are not horned, and how? And whether they may be procured to come larger than usual, as to make an ox or a deer have a greater head of horns? And whether the head of a deer, that by age is more spitted, may be brought again to be more branched? for these trials, and the like, will show, whether by art such hard matter can be called and provoked. It may be tried, also, whether birds may not have something done to them when they are young, whereby they may be made to have greater or longer bills; or greater and longer talons? And whether children may not have some wash, or something to make their teeth better and stronger? Coral is in use as a help to the teeth of children.

Experiments in consort touching the generation and bearing of living creatures in the womb.

758. Some living creatures generate but at certain seasons of the year, as deer, sheep, wild conies, &c., and most sorts of birds and fishes others at any time of the year, as men; and all

domestic creatures, as horses, hogs, dogs, cats, &c. The cause of generation at all seasons seemeth to be fulness: for generation is from redundance. This fulness ariseth from two causes; either from the nature of the creature, if it be hot, and moist, and sanguine; or from plenty of food. For the first, men, horses, dogs, &c. which breed at all seasons, are full of heat and moisture; doves are the fullest of heat and moisture amongst birds, and therefore breed often; the tame dove almost continually. But deer are a melancholy dry creature, as appeareth by their fearfulness, and the hardness of their flesh. Sheep are a cold creature, as appeareth by their mildness, and for that they seldom drink. Most sort of birds are of a dry substance in comparison of beasts. Fishes are cold. For the second cause, fulness of food; men, kine, swine, dogs, &c. feed full; and we see that those creatures, which being wild, generate seldom, being tame, generate often; which is from warmth, and fulness of food. We find, that the time of going to rut of deer is in September; for that they need the whole summer's feed and grass to make them fit for generation. And if rain come early about the middle of September, they go to rut somewhat the sooner; if drought, somewhat the later. So sheep, in respect of their small heat, generate about the same time, or somewhat before. But for the most part, creatures that generate at certain seasons, generate in the spring; as birds and fishes; for that the end of the winter, and the heat and comfort of the spring prepareth them. There is also another reason why some creatures generate at certain seasons; and that is the relation of their time of bearing to the time of generation; for no creature goeth to generate whilst the female is full; nor whilst she is busy in sitting, or rearing her young. And therefore it is found by experience, that if you take the eggs or young ones out of the nests of birds, they will fall to generate again three or four times one after another.

759. Of living creatures, some are longer time in the womb, and some shorter. Women go commonly nine months; the cow and the ewe about six months; does go about nine months; mares eleven months; bitches nine weeks; elephants are said to go two years; for the received tradition of ten years is fabulous. For birds there is double inquiry; the distance between the treading or coupling, and the laying of the egg; and again between the egg laid, and the disclosing or hatching. And amongst birds, there is less diversity of time than amongst other creatures; yet some there is; for the hen sitteth but three weeks, the turkey-hen, goose, and duck, a month: *Query*, of others. The cause of the great difference of times amongst living creatures is, either from the nature of the kind, or from the constitution of the womb. For the former, those that are longer in coming to their maturity or growth are longer in the womb; as is chiefly seen in men: and so elephants, which are long in the womb, are long time in coming to their full growth. But in most other kinds, the constitution of the womb, that is, the hardness or dryness thereof, is concurrent with the former cause. For the colt hath about four years of growth; and so the fawn; and so the calf. But whelps, which come to their growth, commonly, within three quarters of a year, are but nine weeks in the womb. As for birds, as there is less diversity amongst them in the time of bringing forth; so there is less diversity in the time of their growth: most of them coming to their growth within a twelvemonth.

760. Some creatures bring forth many young ones at a burden: as bitches, hares, conies, &c. Some ordinarily but one; as women, lionesses, &c. This may be caused, either by the quantity of sperm required to the producing one of that kind; which if less be required, may admit greater number; if more, fewer: or by the partitions and cells of the womb, which may sever the sperm.

Experiments in consort touching species visible.

761. There is no doubt, but light by refraction will show greater, as well as things coloured. For like as a shilling in the bottom of the water will show greater; so will a candle in a lanthorn, in the bottom of the water. I have heard of a practice, that glow-worms in glasses were put in the water to make the fish come. But I am not yet informed, whether when a diver diveth, having his eyes open, and swimmeth upon his back; whether, I say, he seeth things in the air, greater or less. For it is manifest, that when the eye standeth in the finer medium, and the object is in the grosser, things show greater; but contrariwise, when the eye is placed in the grosser medium, and the object in the finer, how it worketh I know not.

762. It would be well bolted out, whether great refractions may not be made upon reflections, as well as upon direct beams. For example, we see, that take an empty basin, put an angel of gold, or what you will, into it; then go so far from the basin, till you cannot see the angel, because it is not in a right line; then fill the basin with water, and you shall see it out of its place, because of the reflection. To proceed, therefore put a looking-glass into a basin of water; I suppose you shall not see the image in a right line, or at equal angles, but aside. I know not whether this experiment may not be extended so, as you might see the image, and not the glass; which for beauty and strangeness were a fine proof: for then you should see the image like a spirit in the air. As for example, if there be a cistern or pool of water, you shall place over against it a picture of the devil, or what you will,

so as you do not see the water. Then put a looking-glass in the water: now if you can see the devil's picture aside, not seeing the water, it would look like a devil indeed. They have an old tale in Oxford, that Friar Bacon walked between two steeples: which was thought to be done by glasses, when he walked upon the ground.

Experiments in consort touching impulsion and percussion.

763. A weighty body put into motion is more easily impelled than at first when it resteth. The cause is partly because motion doth discuss the torpor of solid bodies; which, besides their motion of gravity, have in them a natural appetite not to move at all; and partly, because a body that resteth, doth get, by the resistance of the body upon which it resteth, a stronger compression of parts than it hath of itself: and therefore needeth more force to be put in motion. For if a weighty body be pensile, and hang but by a thread, the percussion will make an impulsion very near as easily as if it were already in motion.

764. A body over-great or over-small will not be thrown so far as a body of a middle size: so that it seemeth there must be a commensuration, or proportion between the body moved and the force, to make it move well. The cause is, because to the impulsion there is requisite the force of the body that moveth, and the resistance of the body that is moved: and if the body be too great, it yieldeth too little; and if it be too small, it resisteth too little.

765. It is common experience, that no weight will press or cut so strong, being laid upon a body, as falling or stricken from above. It may be the air hath some part in furthering the percussion; but the chief cause I take to be, for that the parts of the body moved have by impulsion, or by the motion of gravity continued, a compression in them, as well downwards, as they have when they are thrown, or shot through the air, forwards. I conceive also, that the quick loose of that motion preventeth the resistance of the body below: and the priority of the force always is of great efficacy, as appeareth in infinite instances.

Experiment solitary touching titillation.

766. Tickling is most in the soles of the feet, and under the arm-holes, and on the sides. The cause is the thinness of the skin in those parts, joined with the rareness of being touched there: for all tickling is a light motion of the spirits, which the thinness of the skin, and suddenness and rareness of touch do further: for we see a feather, or a rush, drawn along the lip or cheek, doth tickle; whereas a thing more obtuse, or a touch more hard, doth not. And for suddenness, we see no man can tickle himself: we see also that the palm of the hand, though it hath as thin a skin as the other parts mentioned, yet is not ticklish, because it is accustomed to be touched. Tickling also causeth laughter. The cause may be the emission of the spirits, and so of the breath, by a flight from titillation; for upon tickling we see there is ever a starting or shrinking away of the part to avoid it; and we see also, that if you tickle the nostrils with a feather, or straw, it procureth sneezing; which is a sudden emission of the spirits, that do likewise expel the moisture. And tickling is ever painful, and not well endured.

Experiment solitary touching the scarcity of rain in Egypt.

767. It is strange, that the river of Nilus overflowing, as it doth, the country of Egypt, there should be, nevertheless, little or no rain in that country. The cause must be either in the nature of the water, or in the nature of the air, or of both. In the water, it may be ascribed either unto the long race of the water; for swift-running waters vapour not so much as standing waters; or else to the concoction of the water; for waters well concocted vapour not so much as waters raw; no more than waters upon the fire do vapour so much after some time of boiling as at the first. And it is true that the water of Nilus is sweeter than other waters in taste; and it is excellent good for the stone, and hypochondriacal melancholy, which showeth it is lenifying; and it runneth through a country of a hot climate, and flat, without shade, either of woods or hills, whereby the sun must needs have great power to concoct it. As for the air, from whence I conceive this want of showers cometh chiefly, the cause must be, for that the air is of itself thin and thirsty; and as soon as ever it getteth any moisture from the water, it imbibeth and dissipateth it in the whole body of the air, and suffereth it not to remain in vapour, whereby it might breed rain.

Experiment solitary touching clarification.

768. It hath been touched in the title of percolations, namely, such as are inwards, that the whites of eggs and milk do clarify; and it is certain, that in Egypt they prepare and clarify the water of Nile, by putting it into great jars of stone, and stirring it about with a few stamped almonds, wherewith they also besmear the mouth of the vessel; and so draw it off, after it hath rested some time. It were good to try this clarifying with almonds in new beer, or muste, to hasten and perfect the clarifying.

Experiment solitary touching plants without leaves.

769. There be scarce to be found any vegetables, that have branches and no leaves, except you allow coral for one. But there is also in the deserts of S. Macario in Egypt, a plant which is long, leafless, brown of colour, and branched like

coral, save that it closeth at the top. This being set in water within a house, spreadeth and displayeth strangely; and the people thereabout have a superstitious belief, that in the labour of women it helpeth to the easy deliverance.

Experiment solitary touching the materials of glass.

770. The crystalline Venice glass is reported to be a mixture in equal portions of stones brought from Pavia by the river Ticinum, and the ashes of a weed, called by the Arabs kal, which is gathered in a desert between Alexandria and Rosetta; and is by the Egyptians used first for fuel; and then they crush the ashes into lumps like a stone, and so sell them to the Venetians for their glass-works.

Experiment solitary touching prohibition of putrefaction, and the long conservation of bodies.

771. It is strange, and well to be noted, how long carcasses have continued uncorrupt, and in their former dimensions, as appeareth in the mummies of Egypt; having lasted, as is conceived, some of them, three thousand years. It is true, they find means to draw forth the brains, and to take forth the entrails, which are the parts aptest to corrupt. But that is nothing to the wonder: for we see what a soft and corruptible substance the flesh of all the other parts of the body is. But it should seem, that, according to our observation and axiom in our hundredth experiment, putrefaction, which we conceive to be so natural a period of bodies, is but an accident; and that matter maketh not that haste to corruption that is conceived. And therefore bodies in shining amber, in quicksilver, in balms, whereof we now speak, in wax, in honey, in gums, and, it may be, in conservatories of snow, &c., are preserved very long. It need not go for repetition, if we resume again that which we said in the aforesaid experiment concerning annihilation; namely, that if you provide against three causes of putrefaction, bodies will not corrupt: the first is, that the air be excluded, for that undermineth the body, and conspireth with the spirit of the body to dissolve it. The second is, that the body adjacent and ambient be not commaterial, but merely heterogeneal towards the body that is to be preserved; for if nothing can be received by the one, nothing can issue from the other; such are quicksilver and white amber, to herbs, and flies, and such bodies. The third is, that the body to be preserved be not of that gross that it may corrupt within itself, although no part of it issue into the body adjacent: and therefore it must be rather thin and small, than of bulk. There is a fourth remedy also, which is, that if the body to be preserved be of bulk, as a corpse is, then the body that incloseth it must have a virtue to draw forth, and dry the moisture of the inward body; for else the putrefaction will play within, though nothing issue forth. I remember Livy doth relate, that there were found at a time two coffins of lead in a tomb; whereof the one contained the body of King Numa, it being some four hundred years after his death: and the other, his books of sacred rites and ceremonies, and the discipline of the pontiffs; and that in the coffin that had the body, there was nothing at all to be seen, but a little light cinders about the sides, but in the coffin that had the books, they were found as fresh as if they had been but newly written, being written on parchment, and covered over with watchcandles of wax three or four fold. By this it seemeth that the Romans in Numa's time were not so good embalmers as the Egyptians were; which was the cause that the body was utterly consumed. But I find in Plutarch and others, that when Augustus Cæsar visited the sepulchre of Alexander the Great in Alexandria, he found the body to keep its dimension; but withal, that notwithstanding all the embalming, which no doubt was the best, the body was so tender, as Cæsar, touching but the nose of it, defaced it. Which maketh me find it very strange, that the Egyptian mummies should be reported to be as hard as stone-pitch; for I find no difference but one, which indeed may be very material, namely that the ancient Egyptian mummies were shrouded in a number of folds of linen, besmeared with gums, in manner of cerecloth, which it doth not appear was practised upon the body of Alexander.

Experiment solitary touching the abundance of nitre in certain sea-shores.

772. Near the castle of Caty, and by the wells of Assan, in the land of Idumea, a great part of the way you would think the sea were near at hand, though it be a good distance off: and it is nothing but the shining of the nitre upon the sea sands, such abundance of nitre the shores there do put forth.

Experiment solitary touching bodies that are borne up by water.

773. The Dead Sea, which vomiteth up bitumen, is of that crassitude, as living bodies bound hand and foot cast into it have been borne up, and not sunk; which showeth, that all sinking into water is but an over-weight of the body put into the water in respect of the water; so that you may make water so strong and heavy, of quicksilver, perhaps, or the like, as may bear up iron: of which I see no use, but imposture. We see also, that all metals, except gold, for the same reason, swim upon quicksilver.

Experiment solitary touching fuel that consumeth little or nothing.

774. It is reported, that at the foot of a hill near the Mare Mortuum there is a black stone, where-

of pilgrims make fires, which burneth like a coal, and diminisheth not, but only waxeth brighter and whiter. That it should do so is not strange: for we see iron red-hot burneth, and consumeth not; but the strangeness is, that it should continue any time so: for iron, as soon as it is out of the fire, deadeth straightways. Certainly it were a thing of great use and profit, if you could find out fuel that would burn hot, and yet last long: neither am I altogether incredulous but there may be such candles as they say are made of salamander's wool; being a kind of mineral, which whiteneth also in the burning, and consumeth not. The question is this; flame must be made of somewhat, and commonly it is made of some tangible body which hath weight: but it is not impossible perhaps that it should be made of spirit, or vapour, in a body, which spirit or vapour hath no weight, such as is the matter of ignis fatuus. But then you will say, that that vapour also can last but a short time: to that it may be answered, that by the help of oil, and wax, and other candle-stuff, the flame may continue, and the wick not burn.

Experiment solitary economical touching cheap fuel.

775. Sea-coal lasts longer than charcoal; and charcoal of roots, being coaled into great pieces, lasts longer than ordinary charcoal. Turf and peat, and cow-sheards, are cheap fuels, and last long. Small-coal, or brier-coal, poured upon charcoal, make them last longer. Sedge is a cheap fuel to brew or bake with: the rather because it is good for nothing else. Trial would be made of some mixture of sea-coal with earth or chalk: for if that mixture be, as the sea-coal men use it, privily, to make the bulk of the coal greater, it is deceit; but if it be used purposely, and be made known, it is saving.

Experiment solitary touching the gathering of wind for freshness.

776. It is at this day in use in Gaza, to couch potsherds or vessels of earth in their walls, to gather the wind from the top, and to pass it down in spouts into rooms. It is a device for freshness in great heats: and it is said, there are some rooms in Italy and Spain for freshness, and gathering the winds and air in the heats of summer; but they be but pennings of the winds, and enlarging them again, and making them reverberate, and go round in circles, rather than this device of spouts in the wall.

Experiment solitary touching the trials of airs.

777. There would be used much diligence in the choice of some bodies and places, as it were, for the tasting of air; to discover the wholesomeness or unwholesomeness, as well of seasons, as of the seats of dwellings. It is certain, that there be some houses wherein confitures and pies will gather mould more than in others. And I am persuaded that a piece of raw flesh or fish will sooner corrupt in some airs than in others. They be noble experiments that can make this discovery; for they serve for a natural divination of seasons, better than the astronomers can by their figures: and again, they teach men where to choose their dwelling for their better health.

Experiment solitary touching increasing of milk in milch beasts.

778. There is a kind of stone about Bethlehem, which they grind to powder, and put into water, whereof cattle drink, which maketh them give more milk. Surely there would be some better trials made of mixtures of water in ponds for cattle, to make them more milch, or to fatten them, or to keep them from murrain. It may be chalk and nitre are of the best.

Experiment solitary touching sand of the nature of glass.

779. It is reported, that in the valley near the mountain Carmel in Judea there is a sand, which of all other hath most affinity with glass: insomuch as other minerals laid in it turn to a glassy substance without the fire; and again, glass put into it turneth into the mother sand. The thing is very strange, if it be true: and it is likeliest to be caused by some natural furnace or heat in the earth; and yet they do not speak of any eruption of flames. It were good to try in glass-works, whether the crude materials of glass, mingled with glass already made, and remolten, do not facilitate the making of glass with less heat.

Experiment solitary touching the growth of coral.

780. In the sea, upon the south-west of Sicily, much coral is found. It is a submarine plant. It hath no leaves; it brancheth only when it is under water; it is soft, and green of colour; but being brought into the air, it becometh hard and shining red, as we see. It is said also to have a white berry: but we find it not brought over with the coral. Belike it is cast away as nothing worth: inquire better of it, for the discovery of the nature of the plant.

Experiment solitary touching the gathering of manna.

781. The manna of Calabria is the best, and in most plenty. They gather it from the leaf of the mulberry-tree; but not of such mulberry-trees as grow in the valleys. And manna falleth upon the leaves by night, as other dews do. It should seem, that before those dews come upon trees in the valleys, they dissipate and cannot hold out. It should seem, also, the mulberry-leaf itself hath some coagulating virtue, which inspissateth the dew, for that it is not found upon other trees: and we see by the silk-worm, which feedeth upon

that leaf, what a dainty smooth juice it hath; and the leaves also, especially of the black mulberry, are somewhat bristly, which may help to preserve the dew. Certainly it were not amiss to observe a little better the dews that fall upon trees, or herbs growing on mountains; for it may be many dews fall, that spend before they come to the valleys. And I suppose, that he that would gather the best May-dew for medicine, should gather it from the hills.

Experiment solitary touching the correcting of wine.

782. It is said they have a manner to prepare their Greek wines, to keep them from fuming and inebriating, by adding some sulphur or alum; whereof the one is unctuous, and the other is astringent. And certain it is, that those two natures do best repress fumes. This experiment would be transferred unto other wine and strong beer, by putting in some like substances while they work; which may make them both to fume less, and to inflame less.

Experiment solitary touching the materials of wild-fire.

783. It is conceived by some, not improbably, that the reason why wild fires, whereof the principal ingredient is bitumen, do not quench with water, is, for that the first concretion of bitumen is a mixture of a fiery and watery substance; so is not sulphur. This appeareth, for that in the place near Puteoli, which they call the court of Vulcan, you shall hear under the earth a horrible thundering of fire and water conflicting together; and there break forth also spouts of boiling water. Now that place yieldeth great quantities of bitumen; whereas Ætna and Vesuvius, and the like, which consist upon sulphur, shoot forth smoke, and ashes, and pumice, but no water. It is reported also, that bitumen mingled with lime, and put under water, will make as it were an artificial rock; the substance becometh so hard.

Experiment solitary touching plaster growing as hard as marble.

784. There is a cement, compounded of flour, whites of eggs, and stone powdered, that becometh hard as marble: wherewith Piscina Mirabilis, near Cuma, is said to have the walls plastered. And it is certain and tried, that the powder of loadstone and flint, by the addition of whites of eggs, and gum-dragon, made into paste, will in a few days harden to the hardness of a stone.

Experiment solitary touching judgment of the cure in some ulcers and hurts.

785. It hath been noted by the ancients, that in full or impure bodies, ulcers or hurts in the legs are hard to cure, and in the head more easy. The cause is, for that ulcers or hurts in the legs require desiccation, which by the defluxion of humours of the lower parts is hindered: whereas hurts and ulcers in the head require it not; but contrariwise dryness maketh them more apt to consolidate. And in modern observation, the like difference hath been found between Frenchmen and Englishmen; whereof the one's constitution is more dry, and the other's more moist. And therefore a hurt of the head is harder to cure in a Frenchman, and of the leg in an Englishman.

Experiment solitary touching the healthfulness or unhealthfulness of the southern wind.

786. It hath been noted by the ancients, that southern winds, blowing much, without rain, do cause a feverous disposition of the year; but with rain, not. The cause is, for that southern winds do of themselves qualify the air, to be apt to cause fevers; but when showers are joined, they do refrigerate in part, and check the sultry heat of the southern wind. Therefore this holdeth not in the sea coasts, because the vapour of the sea, without showers, doth refresh.

Experiment solitary touching wounds.

787. It hath been noted by the ancients, that wounds which are made with brass heal more easily than wounds made with iron. The cause is, for that brass hath in itself a sanative virtue; and so in the very instant helpeth somewhat: but iron is corrosive and not sanative. And therefore it were good, that the instruments which are used by chirurgeons about wounds, were rather of brass than iron.

Experiment solitary touching mortification by cold.

788. In the cold countries, when men's noses and ears are mortified, and, as it were, gangrened with cold, if they come to a fire they rot off presently. The cause is, for that the few spirits that remain in those parts, are suddenly drawn forth, and so putrefaction is made complete. But snow put upon them helpeth: for that it preserveth those spirits that remain, till they can revive; and besides, snow hath in it a secret warmth: as the monk proved out of the text; "qui dat nivem sicut lanam, gelu sicut cineres spargit." Whereby he did infer, that snow did warm like wool, and frost did fret like ashes. Warm water also doth good; because by little and little it openeth the pores, without any sudden working upon the spirits. This experiment may be transferred to the cure of gangrenes, either coming of themselves, or induced by too much applying of opiates; wherein you must beware of dry heat, and resort to things that are refrigerant, with an inward warmth, and virtue of cherishing.

Experiment solitary touching weight.

789. Weigh iron and aqua fortis severally; then dissolve the iron in the aqua fortis, and

weigh the dissolution; and you shall find it to bear as good weight as the bodies did severally: notwithstanding a good deal of waste by a thick vapour that issueth during the working; which showeth that the opening of a body doth increase the weight. This was tried once or twice, but I know not whether there were any error in the trial.

Experiment solitary touching the super-natation of bodies.

790. Take of aqua fortis two ounces, of quicksilver two drams, for that charge the aqua fortis will bear, the dissolution will not bear a flint as big as a nutmeg; yet, no doubt, the increasing of the weight of water will increase its power of bearing; as we see brine, when it is salt enough, will bear an egg. And I remember well a physician, that used to give some mineral baths for the gout, &c.; and the body, when it was put into the bath, could not get down so easily as in ordinary water. But it seemeth the weight of the quicksilver more than the weight of a stone, doth not compense the weight of a stone more than the weight of the aqua fortis.

Experiment solitary touching the flying of unequal bodies in the air.

791. Let there be a body of unequal weight, as of wood and lead, or bone and lead, if you throw it from you with the light end forward, it will turn, and the weightier end will recover to be forwards; unless the body be over-long. The cause is, for that the more dense body hath a more violent pressure of the parts from the first impulsion; which is the cause, though heretofore not found out, as hath been often said, of all violent motions; and when the hinder part moveth swifter, for that it less endureth pressure of parts, than the forward part can make way for it, it must needs be that the body turn over: for, turned, it can more easily draw forward the lighter part. Galilæus noteth it well, that if an open trough wherein water is, be driven faster than the water can follow, the water gathereth upon an heap towards the hinder end, where the motion began, which he supposeth, holding confidently the motion of the earth, to be the cause of the ebbing and flowing of the ocean: because the earth over-runneth the water. Which theory, though it be false, yet the first experiment is true. As for the inequality of the pressure of parts, it appeareth manifestly in this: that if you take a body of stone or iron, and another of wood, of the same magnitude and shape, and throw them with equal force, you cannot possibly throw the wood so far as the stone or iron.

Experiment solitary touching water, that it may be the medium of sounds.

792. It is certain, as it hath been formerly in part touched, that water may be the medium of sounds. If you dash a stone against a stone in the bottom of the water, it maketh a sound. So a long pole struck upon gravel in the bottom of the water maketh a sound. Nay, if you should think that the sound cometh up by the pole, and not by the water, you shall find that an anchor let down by a rope maketh a sound; and yet the rope is no solid body whereby the sound can ascend.

Experiment solitary of the flight of the spirits upon odious objects.

793. All objects of the senses which are very offensive do cause the spirits to retire: and upon their flight, the parts are, in some degree, destitute; and so there is induced in them a trepidation and horror. For sounds, we see that the grating of a saw, or any very harsh noise, will set the teeth on edge, and make all the body shiver. For tastes, we see that in the taking of a potion or pills, the head and the neck shake. For odious smells, the like effect followeth, which is less perceived, because there is a remedy at hand by stopping of the nose; but in horses, that can use no such help, we see the smell of a carrion, especially of a dead horse, maketh them fly away, and take on almost as if they were mad. For feeling, if you come out of the sun suddenly into a shade, there followeth a chillness or shivering in all the body. And even in sight which hath in effect no odious object, coming into sudden darkness induceth an offer to shiver.

Experiments in consort touching the super-reflection of echoes.

794. There is in the city of Ticinum in Italy, a church which hath windows only from above; it is in length a hundred feet, in breadth twenty feet, and in height near fifty; having a door in the midst. It reporteth the voice twelve or thirteen times, if you stand by the close end wall over against the door. The echo fadeth, and dieth by little and little, as the echo at Pont-Charenton doth. And the voice soundeth as if it came from above the door. And if you stand at the lower end, or on either side of the door, the echo holdeth; but if you stand in the door, or in the midst just over against the door, not. Note, that all echoes sound better against old walls than new; because they are more dry and hollow.

Experiment solitary touching the force of imagination, imitating that of the sense.

795. Those effects which are wrought by the percussion of the sense, and by things in fact, are produced likewise in some degree by the imagination. Therefore if a man see another eat sour or acid things, which set the teeth on edge, this object tainteth the imagination. So that he that seeth the thing done by another, hath his own

teeth also set on edge. So if a man see another turn swiftly and long, or if he look upon wheels that turn, himself waxeth turn-sick. So if a man be upon a high place without rails or good hold, except he be used to it, he is ready to fall: for, imagining a fall, it putteth his spirits into the very action of a fall. So many upon the seeing of others bleed, or strangled, or tortured, themselves are ready to faint, as if they bled, or were in strife.

Experiment solitary touching preservation of bodies.

796. Take a stockgillyflower, and tie it gently upon a stick, and put them both into a stoop-glass full of quicksilver, so that the flower be covered: then lay a little weight upon the top of the glass that may keep the stick down; and look upon them after four or five days; and you shall find the flower fresh, and the stalk harder and less flexible than it was. If you compare it with another flower gathered at the same time, it will be the more manifest. This showeth, that bodies do preserve excellently in quicksilver; and not preserve only, but by the coldness of the quicksilver indurate; for the freshness of the flower may be merely conservation; which is the more to be observed, because the quicksilver presseth the flower; but the stiffness of the stalk cannot be without induration, from the cold, as it seemeth, of the quicksilver.

Experiment solitary touching the growth or multiplying of metals.

797. It is reported by some of the ancients, that in Cyprus there is a kind of iron, that being cut into little pieces, and put into the ground, if it be well watered, will increase into greater pieces. This is certain, and known of old, that lead will multiply and increase, as hath been seen in old statues of stone which have been put in cellars; the feet of them being bound with leaden bands; where, after a time, there appeared, that the lead did swell; insomuch as it hanged upon the stone like warts.

Experiment solitary touching the drowning of the more base metal in the more precious.

798. I call drowning of metals, when that the baser metal is so incorporated with the more rich as it can by no means be separated again; which is a kind of version, though false: as if silver should be inseparably incorporated with gold: or copper and lead with silver. The ancient electrum had in it a fifth of silver to the gold, and made a compound metal, as fit for most uses as gold, and more resplendent, and more qualified in some other properties; but then that was easily separated. This to do privily, or to make the compound pass for the rich metal simple, is an adulteration or counterfeiting: but if it be done avowedly, and without disguising, it may be a great saving of the richer metal. I remember to have heard of a man skilful in metals, that a fifteenth part of silver incorporated with gold will not be recovered by any water of separation, except you put a greater quantity of silver to draw to it the less; which, he said, is the last refuge in separations. But that is a tedious way, which no man, almost, will think on. This would be better inquired: and the quantity of the fifteenth turned to a twentieth; and likewise with some little additional, that may further the intrinsic incorporation. Note, that silver in gold will be detected, by weight, compared with the dimensions; but lead in silver, lead being the weightier metal, will not be detected, if you take so much the more silver as will countervail the over-weight of the lead.

Experiment solitary touching fixation of bodies.

799. Gold is the only substance which hath nothing in it volatile, and yet melteth without much difficulty. The melting showeth that it is not jejune, or scarce in spirit. So that the fixing of it is not want of spirit to fly out, but the equal spreading of the tangible parts, and the close coacervation of them: whereby they have the less appetite, and no means at all to issue forth. It were good therefore to try, whether glass remolten do lose any weight? for the parts in glass are evenly spread; but they are not so close as in gold: as we see by the easy admission of light, heat, and cold; and by the smallness of the weight. There be other bodies fixed, which have little or no spirit, so as there is nothing to fly out; as we see in the stuff whereof coppels are made, which they put into furnaces, upon which fire worketh not; so that there are three causes of fixation; the even spreading both of the spirits and tangible parts, the closeness of the tangible parts, and the jejuneness or extreme comminution of spirits: of which three, the two first may be joined with a nature liquefiable, the last not.

Experiment solitary touching the restless nature of things in themselves, and their desire to change.

800. It is a profound contemplation in nature, to consider of the emptiness, as we may call it, or insatisfaction of several bodies, and of their appetite to take in others. Air taketh in lights, and sounds, and smells, and vapours; and it is most manifest, that it doth it with a kind of thirst, as not satisfied with its own former consistence; for else it would never receive them in so suddenly and easily. Water, and all liquors do hastily receive dry and more terrestrial bodies, proportionable: and dry bodies, on the other side, drink in waters and liquors: so that, as it was well said by one of the ancients, of earthy and watery substances, one is a glue to another. Parchment, skins, cloth, &c., drink in liquors,

though themselves be entire bodies, and not comminuted, as sand and ashes, nor apparently porous: metals themselves do receive in readily strong waters; and strong waters likewise do readily pierce into metals and stones: and that strong water will touch upon gold, that will not touch upon silver, and *e converso*. And gold, which seemeth by the weight to be the closest and most solid body, doth greedily drink in quicksilver. And it seemeth, that this reception of other bodies is not violent: for it is many times reciprocal, and as it were with consent. Of the cause of this, and to what axiom it may be referred, consider attentively; for as for the petty assertion, that matter is like a common strumpet, that desireth all forms, it is but a wandering notion. Only flame doth not content itself to take in any other body, but either to overcome and turn another body into itself, as by victory; or itself to die, and go out.

CENTURY IX.

Experiments in consort touching perception in bodies insensible, tending to natural divination or subtile trials.

It is certain, that all bodies whatsoever, though they have no sense, yet they have perception: for when one body is applied to another, there is a kind of election to embrace that which is agreeable, and to exclude or expel that which is ingrate; and whether the body be alterant, or altered, evermore a perception precedeth operation; for else all bodies would be alike one to another. And sometimes this perception, in some kind of bodies, is far more subtile than the sense; so that the sense is but a dull thing in comparison of it: we see a weather-glass will find the least difference of the weather, in heat, or cold, when men find it not. And this perception also is sometimes at distance, as well as upon the touch; as when the loadstone draweth iron, or flame fireth naphtha of Babylon, a great distance off. It is therefore a subject of a very noble inquiry, to inquire of the more subtile perceptions: for it is another key to open nature, as well as the sense, and sometimes better. And, besides, it is a principal means of natural divination; for that which in these perceptions appeareth early, in the great effects cometh long after. It is true also, that it serveth to discover that which is hid, as well as to foretell that which is to come, as it is in many subtile trials; as to try whether seeds be old or new, the sense cannot inform; but if you boil them in water, the new seeds will sprout sooner: and so of water, the taste will not discover the best water; but the speedy consuming of it, and many other means, which we have heretofore set down, lineaments of it. So in all physiognomy, the natural inclinations of the mind which dissimulation will conceal, or discipline will suppress. We shall therefore now handle only those two perceptions, which pertain to natural divination and discovery; leaving the handling of perception in other things to be disposed elsewhere. Now it is true, that divination is attained by other means; as if you know the causes, if you know the concomitants, you may judge of the effect to follow: and the like may be said of discovery; but we tie ourselves here to that divination and discovery chiefly, which is caused by an early or subtile perception.

The aptness or propension of air, or water, to corrupt or putrefy, no doubt, is to be found before it break forth into manifest effects of diseases, blastings, or the like. We will therefore set down some prognostics of pestilential and unwholesome years.

801. The wind blowing much from the south without rain, and worms in the oak-apple, have been spoken of before. Also the plenty of frogs, grasshoppers, flies, and the like creatures bred of putrefaction, doth portend pestilential years.

802. Great and early heats in the spring, and namely in May, without winds, portend the same; and generally so do years with little wind or thunder.

803. Great droughts in summer lasting till towards the end of August, and some gentle showers upon them, and then some dry weather again, do portend a pestilent summer the year following: for about the end of August all the sweetness of the earth, which goeth into plants and trees, is exhaled, and much more if the August be dry, so that nothing then can breathe forth of the earth but a gross vapour, which is apt to corrupt the air: and that vapour, by the first showers, if they be gentle, is released, and cometh forth abundantly. Therefore they that come abroad soon after those showers, are commonly taken with sickness: and in Africa, nobody will stir out of doors after the first showers. But if the showers come vehemently, then they rather wash and fill the earth, than give it leave to breathe forth presently. But if dry weather come again, then it fixeth and consumeth the corruption of the air, upon the first showers begun; and maketh it of ill influence, even to the next summer; except a very frosty winter discharge it, which seldom succeedeth sun droughts.

804. The lesser infections, of the small-pox, purple fevers, agues, in the summer precedent, and hovering all winter, do portend a great pesti-

ence in the summer following; for putrefaction doth not rise to its height at once.

805. It were good to lay a piece of raw flesh or fish in the open air; and if it putrefy quickly, it is a sign of a disposition in the air to putrefaction. And because you cannot be informed whether the putrefaction be quick or late, except you compare this experiment with the like experiment in another year, it were not amiss in the same year, and at the same time, to lay one piece of flesh or fish in the open air, and another of the same kind and bigness within doors: for I judge, that if a general disposition be in the air to putrefy, the flesh, or fish, will sooner putrefy abroad where the air hath more power, than in the house, where it hath less, being many ways corrected. And this experiment would be made about the end of March: for that season is likeliest to discover what the winter hath done, and what the summer following will do, upon the air. And because the air, no doubt, receiveth great tincture and infusion from the earth; it were good to try that exposing of flesh or fish, both upon a stake of wood some height above the earth, and upon the flat of the earth.

806. Take May-dew, and see whether it putrefy quickly or no; for that likewise may disclose the quality of the air, and vapour of the earth, more or less corrupted.

807. A dry March, and a dry May, portend a wholesome summer, if there be a showering April between: but otherwise it is a sign of a pestilential year.

808. As the discovery of the disposition of the air is good for the prognostics of wholesome and unwholesome years; so it is of much more use, for the choice of places to dwell in: at the least, for lodges, and retiring places for health: for mansion-houses respect provisions as well as health, wherein the experiments above-mentioned may serve.

809. But for the choice of places, or seats, it is good to make trial, not only of aptness of air to corrupt, but also of the moisture and dryness of the air, and the temper of it in heat or cold; for that may concern health diversely. We see that there be some houses, wherein sweetmeats will relent, and baked meats will mould, more than in others; and wainscots will also sweat more; so that they will almost run with water; all which, no doubt, are caused chiefly by the moistness of the air in those seats. But because it is bitter to know it before a man buildeth his house, han[illegible] find it after, take the [illegible]

810. Lay wool, or a sponge, or bread, in the place you will try, comparing it with somether places; and see whether it doth not moisten and make the wool, or sponge, &c., more ponderous than the other: and if it do, you may judge of that place, as situated in a gross and moist air.

811. Because it is certain, that in some places, either by the nature of the earth, or by the situation of woods and hills, the air is more unequal than in others; and inequality of air is ever an enemy to health; it were good to take two weather-glasses, matches in all things, and to set them, for the same hours of one day, in several places, where no shade is, nor enclosures; and to mark when you set them, how far the water cometh; and to compare them, when you come again, how the water standeth then; and if you find them unequal, you may be sure that the place where the water is lowest is in the warmer air, and the other in the colder. And the greater the inequality be, of the ascent or descent of the water, the greater is the inequality of the temper of the air.

812. The predictions likewise of cold and long winters, and hot and dry summers, are good to be known, as well for the discovery of the causes, as for divers provisions. That of plenty of haws, and hips, and brier-berries, hath been spoken of before. If wainscot, or stone, that have used to sweat, be more dry in the beginning of winter, or the drops of the eaves of houses come more slowly down than they use, it portendeth a hard and frosty winter. The cause is, for that it showeth an inclination of the air to dry weather, which in winter is ever joined with frost.

813. Generally a moist and cool summer portendeth a hard winter. The cause is, for that the vapours of the earth are not dissipated in the summer by the sun; and so they rebound upon the winter.

814. A hot and dry summer, and autumn, and especially if the heat and drought extend far into September, portendeth an open beginning of winter; and colds to succeed toward the latter part of the winter, and the beginning of the spring: for till then the former heat and drought bear the sway, and the vapours are not sufficiently multiplied.

815. An open and warm winter portendeth a hot and dry summer; for the vapours disperse into the winter showers; whereas cold and frost keepeth them in, and transporteth them into the late spring and summer following.

816. Birds that use to change countries at certain seasons, if they come earlier, do show the temperature of weather, according to that country whence they came: as the winter birds, namely, woodcocks, feldfares, &c., if they come earlier, and out of the northern [illegible] the same country, then they show a temperature of season, like unto that season in which they come: as swallows, bats, cuckoos, &c., that come towards summer, if they come early, show a hot summer to follow.

817. The prognostics, more immediate of weather to follow soon after, are more certain than those of seasons. The resounding of the sea upon the shore; and the murmur of winds in the

woods, without apparent wind, show wind to follow; for such winds breathing chiefly out of the earth, are not at the first perceived, except they be pent by water or wood. And therefore a murmur out of caves likewise portendeth as much.

818. The upper regions of the air perceive the collection of the matter of tempests and winds, before the air here below; and therefore the obscuring of the smaller stars is a sign of tempest following. And of this kind you shall find a number of instances in our inquisition De ventis.

819. Great mountains have a perception of the disposition of the air to tempests, sooner than the valleys or plains below: and therefore they say in Wales, when certain hills have their night-caps on, they mean mischief. The cause is, for that tempests, which are for the most part bred above in the middle region, as they call it, are soonest perceived to collect in the places next it.

820. The air, and fire, have subtile perceptions of wind rising, before men find it. We see the trembling of a candle will discover a wind that otherwise we do not feel; and the flexuous burning of flames doth show the air beginneth to be unquiet; and so do coals of fire by casting off the ashes more than they use. The cause is, for that no wind at the first, till it hath struck and driven the air, is apparent to the sense; but flame is easier to move than air: and for the ashes, it is no marvel, though wind unperceived shake them off; for we usually try which way the wind bloweth, by casting up grass, or chaff, or such light things into the air.

821. When wind expireth from under the sea, as it causeth some resounding of the water, whereof we spake before, so it causeth some light motions of bubbles, and white circles of froth. The cause is, for that the wind cannot be perceived by the sense, until there be an eruption of a great quantity from under the water; and so it getteth into a body: whereas in the first putting up it cometh in little portions.

822. We spake of the ashes that coals cast off; and of grass and chaff carried by the wind; so any light thing that moveth when we find no wind showeth a wind at hand; as when feathers, or down of thistles, fly to and fro in the air.

For prognostics of weather from living creatures it is to be noted, that creatures that live in the open air, sub dio, must needs have a quicker impression from the air, than men that live most within doors; and especially birds who live in the air freest and clearest; and are aptest by their voice to tell tales what they find, and likewise by the motion of their flight to express the same.

823. Water-fowls, as sea-gulls, moor-hens, &c., when they flock and fly together from the sea towards the shores; and contrariwise, land-birds, as crows, swallows, &c., when they fly from the land to the waters, and beat the waters with their wings, do foreshow rain and wind. The cause is, pleasure that both kinds take in the moistness and density of the air; and so desire to be in motion, and upon the wing, whithersoever they would otherwise go; for it is no marvel, that water-fowl do joy most in that air which is likest water: and land-birds also, many of them, delight in bathing, and moist air. For the same reason also, many birds do prune their feathers; and geese do gaggle; and crows seem to call upon rain: all which is but the comfort they seem to receive in the relenting of the air.

824. The heron, when she soareth high, so as sometimes she is seen to pass over a cloud, showeth winds: but kites flying aloft show fair and dry weather. The cause may be, for that they both mount most into the air of that temper wherein they delight: and the heron being a water-fowl, taketh pleasure in the air that is condensed; and besides, being but heavy of wing, needeth the help of the grosser air. But the kite affecteth not so much the grossness of the air, as the cold and freshness thereof: for being a bird of prey, and therefore hot, she delighteth in the fresh air, and many times flieth against the wind, as trouts and salmons swim against the stream. And yet it is true also, that all birds find an ease in the depth of the air, as swimmers do in a deep water. And therefore when they are aloft, they can uphold themselves with their wings spread, scarce moving them.

825. Fishes, when they play towards the top of the water, do commonly foretell rain. The cause is, for that a fish hating the dry, will not approach the air till it groweth moist; and when it is dry, will fly it, and swim lower.

826. Beasts do take comfort generally in a moist air: and it maketh them eat their meat better; and therefore sheep will get up betimes in the morning to feed against rain: and cattle, and deer, and conies, will feed hard before rain; and a heifer will put up her nose, and snuff in the air against rain.

827. The trefoil against rain swelleth in the stalk; and so standeth more upright: for by wet, stalks do erect, and leaves bow down. There is a small red flower in the stubble-fields, which country-people call the wincopipe; which if it open in the morning, you may be sure of a fair day to follow.

828. Even in men, aches, and hurts, and corns, do engrieve either towards rain, or towards frost: for the one maketh the humours more to abound; and the other maketh them sharper. So we see both extremes bring the gout.

829. Worms, vermin, &c., do foreshow likewise rain: for earthworms will come forth, and moles will cast up more, and fleas bite more, against rain.

830. Solid bodies likewise foreshow rain. As stones and wainscot, when they sweat: and boxes and pegs of woods, when they draw and wind

hard; though the former be but from an outward cause; for that the stone, or wainscot, turneth and beateth back the air against itself; and the latter is an inward swelling of the body of the wood itself.

Experiment solitary touching the nature of appetite in the stomach.

831. Appetite is moved chiefly by things that are cold and dry; the cause is, for that cold is a kind of indigence of nature, and calleth upon supply; and so is dryness: and therefore all sour things, as vinegar, juice of lemons, oil of vitriol, &c., provoke appetite. And the disease which they call appetitus caninus, consisteth in the matter of an acid and glassy phlegm in the mouth of the stomach. Appetite is also moved by sour things; for that sour things induce a contraction in the nerves placed in the mouth of the stomach, which is a great cause of appetite. As for the cause why onions, and salt, and pepper in baked meats, move appetite, it is by vellication of those nerves; for motion whetteth. As for wormwood, olives, capers, and others of that kind, which participate of bitterness, they move appetite by abstersion. So as there be four principal causes of appetite; the refrigeration of the stomach joined with some dryness, contraction, vellication, and abstersion; besides hunger; which is an emptiness; and yet over-fasting doth, many times, cause the appetite to cease; for that want of meat maketh the stomach draw humours, and such humours as are light and choleric, which quench appetite most.

Experiment solitary touching sweetness of odour from the rainbow.

832. It hath been observed by the ancients, that where a rainbow seemeth to hang over or to touch, there breatheth forth a sweet smell. The cause is, for that this happeneth but in certain matters, which have in themselves some sweetness; which the gentle dew of the rainbow doth draw forth: and the like do soft showers; for they also make the ground sweet: but none are so delicate as the dew of the rainbow where it falleth. It may be also that the water itself hath some sweetness; for the rainbow consisteth of a glomeration of small drops, which cannot possibly fall but from the air that is very low; and therefore may hold the very sweetness of the herbs and flowers, as a distilled water; for rain, and other dew that fall from high, cannot preserve the smell, being dissipated in the drawing up: neither do we know, whether some water itself may not have some degree of sweetness. It is true, that we find it sensibly in no pool, river, nor fountain; but good earth, newly turned up, hath a freshness and good scent; which water, if it be not too equal, for equal objects never move the sense, may also have. Certain it is, that bay-salt, which is but a kind of water congealed, will sometimes smell like violets.

Experiment solitary touching sweet smells.

833. To sweet smells heat is requisite to concoct the matter; and some moisture to spread the breath of them. For heat, we see that woods and spices are more odorate in the hot countries than in the cold: for moisture, we see that things too much dried lose their sweetness: and flowers growing, smell better in a morning or evening than at noon. Some sweet smells are destroyed by approach to the fire; as violets, wallflowers, gillyflowers, pinks; and generally all flowers that have cool and delicate spirits. Some continue both on the fire, and from the fire; as rosewater, &c. Some do scarce come forth, or at least not so pleasantly, as by means of the fire; as juniper, sweet gums, &c., and all smells that are enclosed in a fast body: but generally those smells are the most grateful, where the degree of heat is small; or where the strength of the smell is allayed; for these things do rather woo the sense, than satiate it. And therefore the smell of violets and roses exceedeth in sweetness that of spices and gums; and the strongest sort of smells are best in a weft afar off.

Experiment solitary touching the corporeal substance of smells.

834. It is certain, that no smell issueth but with emission of some corporeal substance; not as it is in light, and colours, and in sounds. For we see plainly, that smell doth spread nothing that distance that the other do. It is true, that some woods of oranges, and heaths of rosemary, will smell a great way into the sea, perhaps twenty miles; but what is that, since a peal of ordnance will do as much, which moveth in a small compass? Whereas those woods and heaths are of vast spaces; besides, we see that smells do adhere to hard bodies; as in perfuming of gloves, &c., which showeth them corporeal; and do last a great while, which sounds and light do not.

Experiment solitary touching fetid and fragrant odours.

835. The excrements of most creatures smell ill; chiefly to the same creature that voideth them: for we see, besides that of man, that pigeons and horses thrive best, if their houses and stables be kept sweet, and so of cage birds: and the cat burieth that which she voideth: and it holdeth chiefly in those beasts which feed upon flesh. Dogs almost only of beasts delight in fetid odours, which showeth there is somewhat in their sense of smell differing from the smells of other beasts. But the cause why excrements smell ill is manifest; for that the body itself rejecteth

them; much more the spirits: and we see that those excrements that are of the first digestion, smell the worst; as the excrements from the belly; those that are from the second digestion less ill: as urine; and those that are from the third, yet less: for sweat is not so bad as the other two; especially of some persons, that are full of heat. Likewise most putrefactions are of an odious smell: for they smell either fetid or mouldy. The cause may be, for that putrefaction doth bring forth such a consistence, as is most contrary to the consistence of the body whilst it is sound: for it is a mere dissolution of that form. Besides, there is another reason, which is profound: and it is, that the objects that please any of the senses have all some equality, and, as it were, order in their composition; but where those are wanting, the object is ever ingrate. So mixture of many disagreeing colours is ever unpleasant to the eye: mixture of discordant sounds is unpleasant to the ear: mixture, or hotchpotch of many tastes, is unpleasant to the taste; harshness and ruggedness of bodies is unpleasant to the touch; now it is certain, that all putrefaction, being a dissolution of the first form, is a mere confusion and unformed mixture of the part. Nevertheless it is strange, and seemeth to cross the former observation, that some putrefactions and excrements do yield excellent odours, as civet and musk; and, as some think, ambergrease: for divers take it, though improbably, to come from the sperm of fish: and the moss we spake of from apple-trees is little better than an excretion. The reason may be, for that there passeth in the excrements, and remaineth in the putrefactions, some good spirits; especially where they proceed from creatures that are very hot. But it may be also joined with a further cause, which is more subtile; and it is, that the senses love not to be over-pleased, but to have a commixture of somewhat that is in itself ingrate. Certainly, we see how discords in music, falling upon concords, make the sweetest strains: and we see again, what strange tastes delight the taste: as red herrings, caviary, parmesan, &c. And it may be the same holdeth in smells: for those kind of smells that we have mentioned, are all strong, and do pull and vellicate the sense. And we find also, that places where men urine, commonly have some smells of violets: and urine, if one hath eaten nutmeg, hath so too.

The slothful, general, and indefinite contemplations, and notions, of the elements and their conjugations; of the influences of heaven; of heat, cold, moisture, drought, qualities active, passive, and the like, have swallowed up the true passages, and processes, and affects, and consistences of matter and natural bodies. Therefore they are to be set aside, being but notional and ill limited; and definite axioms are to be drawn out of measured instances: and so assent to be made to the more general axioms by scale. And of these kinds of processes of natures and characters of matter, we will now set down some instances.

Experiment solitary touching the causes of putrefaction.

836. All putrefactions come chiefly from the inward spirits of the body; and partly also from the ambient body, be it air, liquor, or whatsoever else. And this last by two means: either by ingress of the substance of the ambient body into the body putrefied; or by excitation and solicitation of the body putrefied, and the parts thereof, by the body ambient. As for the received opinion, that putrefaction is caused, either by cold, or peregrine and preternatural heat, it is but nugation: for cold, in things inanimate, is the greatest enemy that is to putrefaction; though it extinguisheth vivification, which ever consisteth in spirits attenuate, which the cold doth congeal and coagulate. And as for the peregrine heat, it is thus far true, that if the proportion of the adventive heat be greatly predominant to the natural heat and spirits of the body, it tendeth to dissolution, or notable alteration. But this is wrought by emission, or suppression, or suffocation, of the native spirits; and also by the disordination and discomposture of the tangible parts, and other passages of nature, and not by a conflict of heats.

Experiment solitary touching bodies unperfectly mixed.

837. In versions, or main alterations of bodies, there is a medium between the body, as it is at first, and the body resulting; which medium is corpus imperfecte mistum, and is transitory, and not durable; as mists, smokes, vapours, chylus in the stomach, living creatures in the first vivification; and the middle action, which produceth such imperfect bodies, is fitly called, by some of the ancients, inquination, or inconcoction, which is a kind of putrefaction: for the parts are in confusion, till they settle one way or other.

Experiment solitary touching concoction and digestion.

838. The word concoction, or digestion, is chiefly taken into use from living creatures and their organs; and from thence extended to liquors and fruits, &c. Therefore they speak of meat concocted; urine and excrements concocted; and the four digestions, in the stomach, in the liver, in the arteries and nerves, and in the several parts of the body, are likewise call concoctions: and they are all made to be the works of heat, all which notions are but ignorant catches of a few things, which are most obvious to men's observations. The constantest notion of concoction is, that it should signify the degrees of alteration,

of one body into another, from crudity to perfect concoction; which is the ultimity of that action or process; and while the body to be converted and altered is too strong for the efficient that should convert or alter it, whereby it resisteth and holdeth fast in some degree the first form or consistence, it is all that while crude and inconcoct: and the process is to be called crudity and inconcoction. It is true, that concoction is in great part the work of heat, but not the work of heat alone: for all things that further the conversion or alteration, as rest, mixture of a body already concocted, &c., are also means to concoction. And there are of concoction two periods; the one assimilation, or absolute conversion and subaction; the other maturation; whereof the former is most conspicuous in the bodies of living creatures: in which there is an absolute conversion and assimilation of the nourishment into the body: and likewise in the bodies of plants: and again in metals, where there is a full transmutation. The other, which is maturation, is seen in liquors and fruits; wherein there is not desired, nor pretended, an utter conversion, but only an alteration to that form which is most sought for man's use; as in clarifying of drinks, ripening of fruits, &c. But note, that there be two kinds of absolute conversions; the one is, when a body is converted into another body, which was before; as when nourishment is turned into flesh; that is it which we call assimilation. The other is, when the conversion is into a body merely new, and which was not before; as if silver should be turned to gold, or iron to copper: and this conversion is better called, for distinction sake, transmutation.

Experiment solitary touching alterations, which may be called majors.

839. There are also divers other great alterations of matter and bodies, besides those that tend to concoction and maturation; for whatsoever doth so alter a body, as it returneth not again to that it was, may be called "alteratio major;" as when meat is boiled, or roasted, or fried, etc., or when bread and meat are baked; or when cheese is made of curds, or butter of cream, or coals of wood, or bricks of earth; and a number of others. But to apply notions philosophical to plebeian terms; or to say, where the notions cannot fitly be reconciled, that there wanteth a term or nomenclature for it, as the ancients used, they be but shifts of ignorance; for knowledge will be ever a wandering and indigested thing, if it be but a commixture of a few notions that are at hand and occur, and not excited from sufficient number of instances, and those well collated.

The consistence of bodies are very diverse: dense, rare; tangible, pneumatical; volatile, fixed; determinate, not determinate; hard, soft; cleaving, not cleaving; congelable, not congelable, liquefiable, not liquefiable; fragile, tough; flexible, inflexible; tractile, or to be drawn forth in length, intractile; porous, solid; equal and smooth, unequal; venous and fibrous, and with grains, entire; and divers others; all which to refer to heat, and cold, and moisture, and drought, is a compendious and inutile speculation. But of these see principally our "Abecedarium naturæ;" and otherwise "sparsim" in this our "Sylva Sylvarum:" nevertheless, in some good part, we shall handle divers of them now presently.

Experiment solitary touching bodies liquefiable, and not liquefiable.

840. Liquefiable, and not liquefiable, proceed from these causes; liquefaction is ever caused by the detention of the spirits, which play within the body and open it. Therefore such bodies as are more turgid of spirit; or that have their spirits more straitly imprisoned; or, again, that hold them better pleased and content, are liquefiable: for these three dispositions of bodies do arrest the emission of the spirits. An example of the first two properties is in metals; and of the last in grease, pitch, sulphur, butter, wax, &c. The disposition not to liquefy proceedeth from the easy emission of the spirits, whereby the grosser parts contract; and therefore bodies jejune of spirits, or which part with their spirits more willingly, are not liquefiable; as wood, clay, free-stone, &c. But yet even many of those bodies that will not melt, or will hardly melt, will notwithstanding soften: as iron in the forge; and a stick bathed in hot ashes, which thereby becometh more flexible. Moreover there are some bodies which do liquefy or dissolve by fire; as metals, wax, &c.: and other bodies which dissolve in water; as salt, sugar, &c. The cause of the former proceedeth from the dilatation of the spirits by heat: the cause of the latter proceedeth from the opening of the tangible parts, which desire to receive the liquor. Again, there are some bodies that dissolve with both: as gum, etc. And those be such bodies, as on the one side have good store of spirit; and on the other side, have the tangible parts indigent of moisture; for the former helpeth to the dilating of the spirits by fire; and the latter stimulateth the parts to receive the liquor.

Experiment solitary touching bodies fragile and tough.

841. Of bodies, some are fragile: and some are tough, and not fragile; and in the breaking, some fragile bodies break but where the force is; some shatter and fly in many pieces. Of fragility, the cause is an impotency to be extended; and therefore stone is more fragile than metal; and so fictile earth is more fragile than crude earth; and dry wood than green. And the cause of this unaptness to extension, is the small quan-

tity of spirits, for it is the spirit that furthereth the extension or dilatation of bodies, and it is ever concomitant with porosity, and with dryness in the tangible parts: contrariwise, tough bodies have more spirit, and fewer pores, and moister tangible parts: therefore we see that parchment or leather will stretch, paper will not; woollen cloth will tenter, linen scarcely.

Experiment solitary touching the two kinds of pneumaticals in bodies.

842. All solid bodies consist of parts of two several natures, pneumatical and tangible; and it is well to be noted, that the pneumatical substance is in some bodies the native spirit of the body, and in some other, plain air that is gotten in; as in bodies desiccate by heat or age: for in them when the native spirit goeth forth, and the moisture with it, the air with time getteth into the pores. And those bodies are ever the more fragile; for the native spirit is more yielding and extensive, especially to follow the parts, than air. The native spirits also admit great diversity; as hot, cold, active, dull, &c., whence proceed most of the virtues and qualities, as we call them, of bodies: but the air intermixed is without virtues, and maketh things insipid, and without any exstimulation.

Experiment solitary touching concretion and dissolution of bodies.

843. The concretion of bodies is commonly solved by the contrary; as ice, which is congealed by cold, is dissolved by heat; salt and sugar, which are excocted by heat; are dissolved by cold and moisture. The cause is, for that these operations are rather returns to their former nature, than alterations; so that the contrary cureth. As for oil, it doth neither easily congeal with cold, nor thicken with heat. The cause of both effects, though they be produced by contrary efficients, seemeth to be the same; and that is, because the spirit of the oil by either means exhaleth little, for the cold keepeth it in: and the heat, except it be vehement, doth not call it forth. As for cold, though it take hold of the tangible parts, yet as to the spirits, it doth rather make them swell than congeal them: as when ice is congealed in a cup, the ice will swell instead of contracting, and sometimes rift.

[illegible] contrary touching hard and soft bodies.

844. Of bodies, some we see are hard, and some soft: the hardness is caused chiefly by the jejuneness of the spirits, and their imparity with the tangible parts: both which, if they be in a greater degree, make them not only hard, but fragile, and less enduring of pressure; as steel, stone, glass, dry wood, &c. Softness cometh, contrariwise, by the greater quantity of spirits, which ever helpeth to induce yielding and cession, and by the more equal spreading of the tangible parts, which thereby are more sliding and following: as in gold, lead, wax, &c. But note, that soft bodies as we use the word, are of two kinds; the one, that easily giveth place to another body, but altereth not bulk, by rising in other places: and therefore we see that wax, if you put any thing into it, doth not rise in bulk, but only giveth place; for you may not think, that in printing of wax, the wax riseth up at all; but only the depressed part giveth place, and the other remaineth as it was. The other that altereth bulk in the cession, as water, or other liquors, if you put a stone or any thing into them, they give place indeed easily, but then they rise all over; which is a false cession; for it is in place, and not in body.

Experiment solitary touching bodies ductile and tensile.

845. All bodies ductile and tensile, as metals, that will be drawn into wires; wool and tow, that will be drawn into yarn or thread, have in them the appetite of not discontinuing strong, which maketh them follow the force that pulleth them out; and yet so as not to discontinue or forsake their own body. Viscous bodies likewise, as pitch, wax, bird-lime, cheese toasted, will draw forth and rope. But the difference between bodies fibrous and bodies viscous is plain: for al. wool, and tow, and cotton, and silk, especially raw silk, have, besides their desire of continuance, in regard of the tenuity of their thread, a greediness of moisture; and by moisture to join and incorporate with other thread; especially if there be a little wreathing; as appeareth by the twisting of thread, and the practice of twirling about of spindles. And we see also, that gold and silver thread cannot be made without twisting.

Experiment solitary touching other passions of matter, and characters of bodies.

846. The differences of impressible and not impressible; figurable and not figurable; mouldable and not mouldable; scissile and not scissile, and many other passions of matter, are plebeian notions applied unto the instruments and uses which men ordinarily practise; but they are all but the effects of some of these causes following, which we will enumerate without applying them, because [illegible] cession, or not cession of bodies, into a smaller space or room, keeping the outward bulk, and not flying up. The second is the stronger or weaker appetite in bodies to continuity, and to fly discontinuity. The third is the disposition of bodies to contract, or not contract: and again, to extend, or not extend. The fourth is the small quantity, or great quantity of the pneumatical in bodies. The fifth is the nature of the pneumatical, whether it be native spirit of the body, or common air. The sixth is the nature of the native spirits in the body,

whether they be active and eager, or dull and gentle. The seventh is the emission, or detention of the spirits in bodies. The eighth is the dilatation, or contraction of the spirits in bodies, while they are detained. The ninth is the collocation of the spirits in bodies, whether the collocation be equal, or unequal; and again, whether the spirits be coacervate, or diffused. The tenth is the density, or rarity of the tangible parts. The eleventh is the equality, or inequality of the tangible parts. The twelfth is the digestion, or crudity of the tangible parts. The thirteenth is the nature of the matter, whether sulphureous or mercurial, watery or oily, dry and terrestrial, or moist and liquid; which natures of sulphureous and mercurial seem to be natures radical and principal. The fourteenth is the placing of the tangible parts in length or transverse, as it is in the warp and the woof of textiles, more inward or more outward, &c. The fifteenth is the porosity or imporosity betwixt the tangible parts, and the greatness or smallness of the pores. The sixteenth is the collocation and posture of the pores. There may be more causes; but these do occur for the present.

Experiment solitary touching induration by sympathy.

847. Take lead and melt it, and in the midst of it, when it beginneth to congeal, make a little dint or hole, and put quicksilver wrapped in a piece of linen into that hole, and the quicksilver will fix and run no more, and endure the hammer. This is a noble instance of induration, by consent of one body with another, and motion of excitation to imitate; for to ascribe it only to the vapour of lead, is less probable. *Query*, whether the fixing may be in such a degree, as it will be figured like other metals? For if so, you may make works of it for some purposes, so they come not near the fire.

Experiment solitary touching honey and sugar.

848. Sugar hath put down the use of honey, insomuch as we have lost those observations and preparations of honey which the ancients had, when it was more in price. First, it seemeth that there was in old time tree-honey, as well as bee-honey, which was the tear or blood issuing from the tree: insomuch as one of the ancients relateth, that in Trebisond [illegible] made men mad. Again, in ancient time there was a kind of honey, which either of its own nature, or by art, would grow as hard as sugar, and was not so luscious as ours. They had also a wine of honey, which they made thus. They crushed the honey into a great quantity of water, and then strained the liquor: after they boiled it in a copper to the half; then they poured it into earthen vessels for a small time, and after turned it into vessels of wood, and kept it for many years. They have also at this day, in Russia and those northern countries, mead simple, which, well made and seasoned, is a good wholesome drink, and very clear. They use also in Wales a compound drink of mead, with herbs and spices. But meanwhile it were good, in recompense of that we have lost in honey, there were brought in use a sugar-mead, for so we may call it, though without any mixture at all of honey, and to brew it, and keep it stale, as they use mead: for certainly, though it would not be so abstersive, and opening, and solutive a drink as mead; yet it will be more grateful to the stomach, and more lenitive, and fit to be used in sharp diseases: for we see, that the use of sugar in beer and ale hath good effects in such cases.

Experiment solitary touching the finer sort of base metals.

849. It is reported by the ancients, that there was a kind of steel in some places, which would polish almost as white and bright as silver. And that there was in India a kind of brass, which, being polished, could scarce be discerned from gold. This was in the natural ure: but I am doubtful, whether men have sufficiently refined metals, which we count base; as whether iron, brass, and tin be refined to the height? But when they come to such a fineness, as serveth the ordinary use, they try no farther.

Experiment solitary touching cements and quarries.

850. There have been found certain cements under earth that are very soft; and yet, taken forth into the sun, harden as hard as marble: there are also ordinary quarries in Somersetshire, which in the quarry cut soft to any bigness, and in the building prove firm and hard.

Experiment solitary touching the altering of the colour of hairs and feathers.

851. Living creatures generally do change their hair with age, turning to be gray and white: as is seen in men, though some earlier, some later; in horses that are dappled, and turn white; in old squirrels that turn grisly; and many others. So do some birds; as cygnets from the gray turn white; hawks from brown turn more white. And some birds there be that upon their moulting do turn colour; as robin-red-breasts, after their moulting, grow to be red again by degrees, so do [illegible] moisture doth chiefly colour hair and feathers, the dryness turneth them grey and white: now hair in age waxeth drier; so do feathers. As for feathers, after moulting, they are young feathers, and so all one as the feathers of young birds. So the beard is younger than the hair of the head, and doth, for the most part, wax hoary later. Out of this ground a man may devise the means of altering the colour of birds, and the retardation of hoary hairs. But of this see the fifth experiment.

Experiment solitary touching the differences of living creatures, male and female.

852. The difference between male and female, in some creatures, is not to be discerned, otherwise than in the parts of generation: as in horses and mares, dogs and bitches, doves he and she, and others. But some differ in magnitude, and that diversely; for in most the male is the greater; as in man, pheasants, peacocks, turkeys, and the like: and in some few, as in hawks, the female. Some differ in the hair and feathers, both in the quantity, crispation, and colours of them; as helions are hirsute, and have great manes: the shes are smooth like cats. Bulls are more crisp upon the forehead than cows; the peacock, and pheasant-cock, and goldfinch-cock, have glorious and fine colours; the hens have not. Generally the hen in birds have the fairest feathers. Some differ in divers features: as bucks have horns, does none; rams have more wreathed horns than ewes; cocks have great combs and spurs, hens little or none; boars have great fangs; sows much less; the turkey-cock hath great and swelling gills, the hen hath less: men have generally deeper and stronger voices than women. Some differ in faculty, as the cocks amongst singing-birds are the best singers. The chief cause of all these, no doubt is, for that the males have more strength of heat than the females, which appeareth manifestly in this, that all young creatures males are like females, and so are eunuchs, and gelt creatures of all kinds, liker females. Now heat causeth greatness of growth, generally, where there is moisture enough to work upon: but if there be found in any creature, which is seen rarely, an over-great heat in proportion to the moisture, in them the female is the greater, as in hawks and sparrows. And if the heat be balanced with the moisture, then there is no difference to be seen between male and female, as in the instances of horses and dogs. We see also, that the horns of oxen and cows, for the most part, are larger than the bulls, which is caused by abundance of moisture, which in the horns of the bull faileth. Again, heat causeth pilosity and crispation, and so likewise beards in men. It also expelleth finer moisture, which want of heat cannot expel; and that is the cause of the beauty and variety of feathers. Again, heat doth put forth many excrescences, and much solid matter, which want of heat cannot do; and this is the cause of horns, and of the greatness of them, and of the greatness of the combs and spurs of cocks, gills of turkey-cocks, and fangs of boars. Heat also dilateth the pipes and organs, which causeth the deepness of the voice. Again, heat refineth the spirits, and that causeth the cock singing-bird to excel the hen.

Experiment solitary touching the comparative magnitude of living creatures.

853. There be fishes greater than any beasts; as the whale is far greater than the elephant: and beasts are generally greater than birds. For fishes, the cause may be, that because they live not in the air, they have not their moisture drawn and soaked by the air and sun-beams. Also they rest always in a manner, and are supported by the water, whereas motion and labour do consume. As for the greatness of beasts more than of birds, it is caused, for that beasts stay longer time in the womb than birds, and there nourish and grow; whereas in birds, after the egg laid, there is no further growth or nourishment from the female; for the sitting doth vivify, and not nourish.

Experiment solitary touching excossation of fruits.

854. We have partly touched before the means of producing fruits without cores or stones. And this we add farther, that the cause must be abundance of moisture; for that the core and stone are made of dry sap: and we see that it is possible to make a tree put forth only in blossom, without fruit, as in cherries with double flowers, much more into fruit without stone or cores. It is reported that a scion of an apple, grafted upon a colewort stalk, sendeth forth a great apple without a core. It is not unlikely, that if the inward pith of a tree were taken out, so that the juice came only by the bark, it would work the effect. For it hath been observed, that in pollards, if the water get in on the top, and they become hollow, they put forth the more. We add also, that it is delivered for certain by some, that if the scion be grafted the small end downwards, it will make fruit have little or no cores and stones.

Experiment solitary touching the melioration of tobacco.

855. Tobacco is a thing of great price, if it be in request: for an acre of it will be worth, as is affirmed, two hundred pounds by the year towards charge. The charge of making the ground and otherwise is great, but nothing to the profit; but the English tobacco hath small credit, as being too dull and earthy: nay, the Virginian tobacco, though that be in a hotter climate, can get no credit for the same cause: so that a trial to make tobacco more aromatical, and better concocted, here in England, were a thing of great profit. Some have gone about to do it by drenching the English tobacco in a decoction or infusion of Indian tobacco; but those are but sophistications and toys; for nothing that is once perfect, and hath run his race, can receive much amendment. You must ever resort to the beginnings of things for melioration. The way of maturation of tobacco must, as in other plants, be from the heat either of the earth or of the sun: we see some leading of this in musk-melons, which are sown upon a hot-bed dunged below, upon a bank turned upon the south sun, to give heat by reflection; laid upon tiles, which increaseth the heat, and covered

with straw to keep them from cold. They remove them also, which addeth some life: and by these helps they become as good in England, as in Italy or Provence. These, and the like means, may be tried in tobacco. Inquire also of the steeping of the roots in some such liquor as may give them vigour to put forth strong.

Experiment solitary touching several heats working the same effects.

856. Heat of the sun for the maturation of fruits; yea, and the heat of vivification of living creatures, are both represented and supplied by the heat of fire; and likewise the heats of the sun, and life, are represented one by the other. Trees set upon the backs of chimneys do ripen fruit sooner. Vines, that have been drawn in at the window of a kitchen, have sent forth grapes ripe a month at least before others. Stoves at the back of walls bring forth oranges here with us. Eggs, as is reported by some, have been hatched in the warmth of an oven. It is reported by the ancients, that the ostrich layeth her eggs under sand, where the heat of the sun discloseth them.

Experiment solitary touching swelling and dilatation in boiling.

857. Barley in the boiling swelleth not much; wheat swelleth more; rice extremely, insomuch as a quarter of a pint, unboiled, will arise to a pint boiled. The cause no doubt is, for that the more close and compact the body is, the more it will dilate: now barley is the most hollow; wheat more solid than that; and rice most solid of all. It may be also that some bodies have a kind of lentour, and more depertible nature than others; as we see it evident in colouration; for a small quantity of saffron will tinct more than a very great quantity of brasil or wine.

Experiment solitary touching the dulcoration of fruits.

858. Fruit groweth sweet by rolling, or pressing them gently with the hand; as rolling pears, damascenes, &c.: by rottenness; as medlars, services, sloes, hips, &c.: by time; as apples, wardens, pomegranates, &c.: by certain special maturations; as by laying them in hay, straw, &c.: and by fire; as in roasting, stewing, baking, &c. The cause of the sweetness by rolling and pressing, is emollition, which they properly induce; as in beating of stock-fish, flesh, &c.: by rottenness is, for that the spirits of the fruit by putrefaction gather heat, and thereby digest the harder part, for in all putrefactions there is a degree of heat: by time and keeping is, because the spirits of the body do ever feed upon the tangible parts, and attenuate them: by several maturations is, by some degree of heat: and by fire is, because it is the proper work of heat to refine, and to incorporate; and all sourness consisteth in some grossness of the body; and all incorporation doth make the mixture of the body more equal in all the parts; which ever induceth a milder taste.

Experiment solitary touching flesh edible, and not edible.

859. Of fleshes, some are edible; some, except it be in famine, not. F r those that are not edible, the cause is, for that they have commonly too much bitterness of taste; and therefore those creatures which are fierce and choleric are not edible; as lions, wolves, squirrels, dogs, foxes, horses, &c. As for kine, sheep, goats, deer, swine, conies, hares, &c., we see they are mild and fearful. Yet it is true, that horses, which are beasts of courage, have been, and are eaten by some nations; as the Scythians were called Hippophagi; and the Chinese eat horse-flesh at this day; and some gluttons have used to have colts'-flesh baked. In birds, such as are carnivorse, and birds of prey, are commonly no good meat, but the reason is, rather the choleric nature of those birds, than their feeding upon flesh: for pewets, gulls, shovellers, ducks, do feed upon flesh, and yet are good meat. And we see that those birds which are of prey, or feed upon flesh, are good meat when they are very young; as hawks, rooks out of the nest, owls, &c. Man's flesh is not eaten. The reasons are three: first, because men in humanity do abhor it: secondly, because no living creature that dieth of itself is good to eat: and therefore the cannibals themselves eat no man's flesh of those that die of themselves, but of such as are slain. The third is, because there must be generally some disparity between the nourishment and the body nourished; and they must not be over-near, or like: yet we see, that in great weaknesses and consumptions, men have been sustained with woman's milk; and Facinus, fondly, as I conceive, adviseth, for the prolongation of life, that a vein be opened in the arm of some wholesome young man, and the blood to be sucked. It is said that witches do greedily eat man's flesh; which if it be true, besides a devilish appetite in them, it is likely to proceed, for that man's flesh may send up high and pleasing vapours, which may stir the imagination; and witches' felicity is chiefly in imagination, as hath been said.

Experiment solitary touching the salamander.

860. There is an ancient received tradition of the salamander, that it liveth in the fire, and hath force also to extinguish the fire. It must have two things, if it be true, to this operation: the one a very close skin, whereby flame, which in the midst is not so hot, cannot enter; for we see that if the palm of the hand be anointed thick with white of egg, and then aqua vitae be poured upon it, and inflamed, yet one may endure the

flame a pretty while. The other is some extreme cold and quenching virtue in the body of that creature, which choketh the fire. We see that milk quencheth wildfire better than water, because it entereth better.

Experiment solitary touching the contrary operations of time upon fruits and liquors.

861. Time doth change fruit, as apples, pears, pomegranates, &c., from more sour to more sweet: but contrariwise liquors, even those that are of the juice of fruit, from more sweet to more sour: as wort, musted, new verjuice, &c. The cause is, the congregation of the spirits together: for in both kinds the spirit is attenuated by time; but in the first kind it is more diffused, and more mastered by the grosser parts, which the spirits do but digest: but in drinks the spirits do reign, and finding less opposition of the parts, become themselves more strong; which causeth also more strength in the liquor; such as if the spirits be of the hotter sort, the liquor becometh apt to burn: but in time, it causeth likewise, when the higher spirits are evaporated, more sourness.

Experiment solitary touching blows and bruises.

862. It hath been observed by the ancients, that plates of metal, and especially of brass, applied presently to a blow, will keep it down from swelling. The cause is repercussion, without humectation or entrance of any body: for the plate hath only a virtual cold, which doth not search into the hurt; whereas all plasters and ointments do enter. Surely, the cause that blows and bruises induce swellings is, for that the spirits resorting to succour the part that laboureth, draw also the humours with them: for we see, that it is not the repulse and the return of the humour in the part strucken that causeth it; for that gouts and toothaches cause swelling, where there is no percussion at all.

Experiment solitary touching the orrice root.

863. The nature of the orrice root is almost singular; for there be few odoriferous roots; and in those that are in any degree sweet, it is but the same sweetness with the wood or leaf: but the orrice is not sweet in the leaf; neither is the flower any thing so sweet as the root. The root seemeth to have a tender dainty heat; which when it cometh above ground to the sun and the air, vanisheth: for it is a great mollifier; and hath a smell like a violet.

Experiment solitary touching the compression of liquors.

864. It hath been observed by the ancients, that a great vessel full, drawn into bottles, and then the liquor put again into the vessel, will not fill the vessel again so full as it was, but that it may take in more liquor: and that this holdeth more in wine than in water. The cause may be trivial: namely, by the expense of the liquor, in regard some may stick to the sides of the bottles: but there may be a cause more subtile; which is, that the liquor in the vessel is not so much compressed as in the bottle; because in the vessel the liquor meeteth with liquor chiefly; but in the bottles a small quantity of liquor meeteth with the sides of the bottles, which compress it so that it doth not open again.

Experiment solitary touching the working of water upon air contiguous.

865. Water, being contiguous with air, cooleth it, but moisteneth it not, except it vapour. The cause is, for that heat and cold have a virtual transition, without communication of substance; but moisture not: and to all madefaction there is required an imbibition: but where the bodies are of such several levity and gravity as they mingle not, there can follow no imbibition. And therefore, oil likewise lieth at the top of the water, without commixture: and a drop of water running swiftly over a straw or smooth body, wetteth not.

Experiment solitary touching the nature of air.

866. Starlight nights, yea, and bright moonshine nights, are colder than cloudy nights. The cause is, the dryness and fineness of the air, which thereby becometh more piercing and sharp; and therefore great continents are colder than islands: and as for the moon, though itself inclineth the air to moisture, yet when it shineth bright, it argueth the air is dry. Also close air is warmer than open air; which, it may be, is, for that the true cause of cold is an expiration from the globe of the earth, which in open places is stronger; and again, air itself, if it be not altered by that expiration, is not without some secret degree of heat; as it is not likewise without some secret degree of light: for otherwise cats and owls could not see in the night; but that air hath a little light, proportionable to the visual spirits of those creatures.

Experiments in consort touching the eyes and sight.

867. The eyes do move one and the same way; for when one eye moveth to the nostril, the other moveth from the nostril. The cause is, motion of consent, which in the spirits and parts spiritual is strong. But yet use will induce the contrary; for some can squint when they will: and the common tradition is, that if children be set upon a table with a candle behind them, both eyes will move outwards, as affecting to see the light, and so induce squinting.

868. We see more exquisitely with one eye shut, than with both open. The cause is, for that the spirits visual unite themselves more, and so become stronger. For you may see, by looking

in a glass, that when you shut one eye, the pupil of the other eye that is open dilateth.

869. The eyes, if the sight meet not in one angle, see things double. The cause is, for that seeing two things, and seeing one thing twice, worketh the same effect: and therefore a little pellet held between two fingers laid across, seemeth double.

870. Poreblind men see best in the dimmer lights: and likewise have their sight stronger near hand, than those that are not poreblind; and can read and write smaller letters. The cause is, for that the spirits visual in those that are poreblind, are thinner and rarer than in others; and therefore the greater light disperseth them. For the same cause they need contracting; but being contracted, are more strong than the visual spirits of ordinary eyes are; as when we see through a level, the sight is the stronger; and so is it when you gather the eyelids somewhat close: and it is commonly seen in those that are poreblind, that they do much gather the eyelids together. But old men, when they would see to read, put the paper somewhat afar off: the cause is, for that old men's spirits visual, contrary to those of poreblind men, unite not, but when the object is at some good distance from their eyes.

871. Men see better, when their eyes are over-against the sun or candle, if they put their hand a little before their eyes. The reason is, for that the glaring of the sun or the candle doth weaken the eye; whereas the light circumfused is enough for the perception. For we see that an over-light maketh the eyes dazzle; insomuch as perpetual looking against the sun would cause blindness. Again, if men come out of great light into a dark room; and contrariwise, if they come out of a dark room into a light room, they seem to have a mist before their eyes, and see worse than they shall do after they have stayed a little while, either in the light or in the dark. The cause is, for that the spirits visual are, upon a sudden change, disturbed and put out of order; and till they be recollected, do not perform their function well. For when they are much dilated by light, they cannot contract suddenly; and when they are much contracted by darkness, they cannot dilate suddenly. And excess of both these, that is, of the dilatation and contraction of the spirits visual, if it be long destroyeth the eye. For as long looking against the sun or fire hurteth the eye by dilatation; so curious painting in small volumes, and reading of small letters, do hurt the eye by contraction.

872. It hath been observed, that in anger the eyes wax red; and in blushing, not the eyes, but the ears, and the parts behind them. The cause is, for that in anger the spirits ascend and wax eager; which is most easily seen in the eyes, because they are translucid; though withal it maketh both the cheeks and the gills red; but in blushing, it is true the spirits ascend likewise to succour both the eyes and the face, which are the parts that labour; but then they are repulsed by the eyes, for that the eyes, in shame, do put back the spirits that ascend to them, as unwilling to look abroad: for no man in that passion doth look strongly, but dejectedly; and that repulsion from the eyes diverteth the spirits and heat more to the ears, and the parts by them.

873. The objects of the sight may cause a great pleasure and delight in the spirits, but no pain or great offence; except it be by memory, as hath been said. The glimpses and beams of diamonds that strike the eye; Indian feathers, that have glorious colours; the coming into a fair garden; the coming into a fair room richly furnished; a beautiful person; and the like; do delight and exhilarate the spirits much. The reason why it holdeth not in the offence is, for that the sight is the most spiritual of the senses; whereby it hath no object gross enough to offend it. But the cause chiefly is, for that there be no active objects to offend the eye. For harmonical sounds, and discordant sounds, are both active and positive: so are sweet smells and stinks: so are bitter and sweet in tastes: so are over-hot and over-cold in touch: but blackness and darkness are indeed but privatives; and therefore have little or no activity. Somewhat they do contristate, but very little.

Experiment solitary touching the colour of the sea or other water.

874. Water of the sea, or otherwise, looketh blacker when it is moved, and whiter when it resteth. The cause is, for that by means of the motion, the beams of light pass not straight, and therefore must be darkened: whereas, when it resteth, the beams do pass straight. Besides, splendour hath a degree of whiteness; especially if there be a little repercussion: for a looking-glass with the steel behind, looketh whiter than glass simple. This experiment deserveth to be driven farther, in trying by what means motion may hinder sight.

Experiment solitary touching shell-fish.

875. Shell-fish have been, by some of the ancients, compared and sorted with the insecta; but I see no reason why they should; for they have male and female as other fish have: neither are they bred of putrefaction; especially such as do move. Nevertheless it is certain, that oysters, and cockles, and mussels, which move not, have no discriminate sex. *Query*, in what time, and how they are bred? It seemeth, that shells of oysters are bred where none were before; and it is tried, that the great horse-mussel, with the fine shell, that breedeth in ponds, hath bred within thirty years: but then, which is strange, it hath been tried, that they do not only gape and

shut as the oysters do, but remove from one place to another.

Experiment solitary touching the right side and the left.

876. The senses are alike strong, both on the right side and on the left; but the limbs on the right side are stronger. The cause may be, for that the brain, which is the instrument of sense, is alike on both sides; but motion, and abilities of moving, are somewhat holpen from the liver, which lieth on the right side. It may be also, for that the senses are put in exercise indifferently on both sides from the time of our birth; but the limbs are used most on the right side, whereby custom helpeth; for we see that some are left-handed; which are such as have used the left hand most.

Experiment solitary touching frictions.

877. Frictions make the parts more fleshy and full; as we see both in men, and in currying of horses, &c. The cause is, for that they draw greater quantity of spirits and blood to the parts: and again, because they draw the aliment more forcibly from within: and again, because they relax the pores, and so make better passage for the spirits, blood, and aliment: lastly, because they dissipate and digest any inutile or excrementitious moisture which lieth in the flesh; all which help assimilation. Frictions also do more fill and impinguate the body than exercise. The cause is, for that in frictions the inward parts are at rest; which in exercise are beaten, many times, too much: and for the same reason, as we have noted heretofore, galley-slaves are fat and fleshy because they stir the limbs more, and the inward parts less.

Experiment solitary touching globes appearing flat at distance.

878. All globes afar off appear flat. The cause is, for that distance, being a secondary object of sight, is not otherwise discerned, than by more or less light; which disparity, when it cannot be discerned, all seemeth one: as it is, generally, in objects not distinctly discerned; for so letters, if they be so far off as they cannot be discerned, show but as a duskish paper; and all engravings and embossings, afar off, appear plain.

Experiment solitary touching shadows.

879. The uttermost parts of shadows seem ever to tremble. The cause is, for that the little motes which we see in the sun do ever stir, though there be no wind; and therefore those moving, in the meeting of the light and the shadow, from the light to the shadow, and from the shadow to the light, do show the shadow to move, because the medium moveth.

Experiment solitary touching the rolling and breaking of the seas.

880. Shallow and narrow seas break more than deep and large. The cause is, for that, the impulsion being the same in both, where there is greater quantity of water, and likewise space enough, there the water rolleth and moveth, both more slowly, and with a sloper rise and fall: but where there is less water, and less space, and the water dasheth more against the bottom, there it moveth more swiftly, and more in precipice; for in the breaking of the waves there is ever a precipice.

Experiment solitary touching the dulcoration of salt water.

881. It hath been observed by the ancients, that salt water boiled, or boiled and cooled again, is more potable, than of itself raw: and yet the taste of salt in distillations by fire riseth not, for the distilled water will be fresh. The cause may be, for that the salt part of the water doth partly rise into a kind of scum on the top, and partly goeth into a sediment in the bottom, and so is rather a separation than an evaporation. But it is too gross to rise into a vapour, and so is a bitter taste likewise; for simple distilled waters, of wormwood, and the like, are not bitter

Experiment solitary touching the return of saltness in pits upon the seashore.

882. It hath been set down before, that pits upon the seashore turn into fresh water, by percolation of the salt through the sand: but it is further noted, by some of the ancients, that in some places of Africa, after a time, the water in such pits will become brackish again. The cause is, for that after a time, the very sands through which the salt water passeth, become salt, and so the strainer itself is tinctured with salt. The remedy therefore is, to dig still new pits, when the old wax brackish; as if you would change your strainer.

Experiment solitary touching attraction by similitude of substance.

883. It hath been observed by the ancients, that salt water will dissolve salt put into it, in less time than fresh water will dissolve it. The cause may be, for that the salt in the precedent water doth, by similitude of substance, draw the salt new put in unto it; whereby it diffuseth in the liquor more speedily. This is a noble experiment, if it be true, for it showeth means of more quick and easy infusions, and it is likewise a good instance of attraction by similitude of substance. Try it with sugar put into water formerly sugared, and into other water unsugared.

Experiment solitary touching attraction.

884. Put sugar into wine, part of it above,

part under the wine, and you shall find, that which may seem strange, that the sugar above the wine will soften and dissolve sooner than that within the wine. The cause is, for that the wine entereth that part of the sugar which is under the wine, by simple infusion or spreading; but that part above the wine is likewise forced by sucking; for all spongy bodies expel the air and draw in liquor, if it be contiguous: as we see it also in sponges put part above the water. It is worthy the inquiry, to see how you may make more accurate infusions, by help of attraction.

Experiment solitary touching heat under earth.

885. Water in wells is warmer in winter than in summer; and so air in caves. The cause is, for that in the higher parts, under the earth, there is a degree of some heat, as appeareth in sulphureous veins, &c., which shut close in, as in winter, is the more; but if it perspire, as it doth in summer, it is the less.

Experiment solitary touching flying in the air.

886. It is reported, that amongst the Leucadians, in ancient time, upon a superstition they did use to precipitate a man from a high cliff into the sea, tying about him with strings, at some distance, many great fowls, and fixing unto his body divers feathers, spread, to break the fall. Certainly many birds of good wing, as kites, and the like, would bear up a good weight as they fly, and spreading of feathers thin and close, and in great breadth, will, likewise, bear up a great weight, being even laid, without tilting upon the sides. The farther extension of this experiment for flying may be thought upon.

Experiment solitary touching the dye of scarlet.

887. There is in some places, namely in Cephalonia, a little shrub which they call hollyoak, or dwarf-oak: upon the leaves whereof there riseth a tumour like a blister; which they gather, and rub out of it a certain red dust, that converteth, after a while, into worms, which they kill with wine, as is reported, when they begin to quicken: with this dust they dye scarlet.

Experiment solitary touching maleficiating.

888. In Zant it is very ordinary to make men impotent to accompany with their wives. The like is practised in Gascony; where it is called nouër l'eguillette. It is practised always upon the wedding-day. And in Zant the mothers themselves do it, by way of prevention; because thereby they hinder other charms, and can undo their own. It is a thing the civil law taketh knowledge of; and therefore is of no light regard.

Experiment solitary touching the rise of water by means of flame.

889 It is a common experiment, but the cause is mistaken. Take a pot, or better a glass, because therein you may see the motion, and set a candle lighted in the bottom of a bason of water, and turn the mouth of the pot or glass over the candle, and it will make the water rise. They ascribe it to the drawing of heat; which is not true: for it appeareth plainly to be but a motion of nexe, which they call ne detur vacuum; and it proceedeth thus. The flame of the candle, as soon as it is covered, being suffocated by the close air, lesseneth by little and little; during which time there is some little ascent of water, but not much: for the flame occupying less and less room, as it lesseneth, the water succeedeth. But upon the instant of the candle's going out, there is a sudden rise of a great deal of water; for that the body of the flame filleth no more place, and so the air and the water succeed. It worketh the same effect, if instead of water you put flour or sand into the bason: which showeth, that it is not the flame's drawing the liquor as nourishment, as it is supposed; for all bodies are alike unto it, as it is ever in motion of nexe; insomuch as I have seen the glass, being held by the hand, hath lifted up the bason and all: the motion of nexe did so clasp the bottom of the bason. That experiment, when the bason was lifted up, was made with oil, and not with water: nevertheless this is true, that at the very first setting of the mouth of the glass upon the bottom of the bason, it draweth up the water a little, and then standeth at a stay, almost till the candle's going out, as was said. This may show some attraction at first: but of this we will speak more, when we handle attractions by heat.

Experiments in consort touching the influences of the moon.

Of the power of the celestial bodies, and what more secret influences they have, besides the two manifest influences of heat and light, we shall speak when we handle experiments touching the celestial bodies; mean while we will give some directions for more certain trials of the virtue and influences of the moon, which is our nearest neighbour.

The influences of the moon, most observed, are four; the drawing forth of heat: the inducing of putrefaction; the increase of moisture; the exciting of the motions of spirits.

890. For the drawing forth of heat, we have formerly prescribed to take water warm, and to set part of it against the moon-beams, and part of it with a screen between; and to see whether that which standeth exposed to the beams will not cool sooner. But because this is but a small interposition, though in the sun we see a small shade doth much, it were good to try it when the moon shineth, and when the moon shineth not at all; and with water warm in a glass bottle, as well as in a dish; and with cinders; and with iron red-hot, &c.

891. For the inducing of putrefaction, it were good to try it with flesh or fish exposed to the moonbeams; and again exposed to the air when the moon shineth not, for the like time: to see whether will corrupt sooner: and try it also with capon, or some other fowl, laid abroad, to see whether it will mortify and become tender sooner; try it also with dead flies, or dead worms, having a little water cast upon them, to see whether will putrefy sooner. Try it also with an apple or orange, having holes made in their tops, to see whether will rot or mould sooner. Try it also with Holland cheese, having wine put into it, whether will breed mites sooner or greater.

892. For the increase of moisture, the opinion received is; that seeds will grow soonest; and hair, and nails, and hedges and herbs cut, &c., will grow soonest, if they be set or cut in the increase of the moon. Also that brains in rabbits, woodcocks, calves, &c., are fullest in the full of the moon: and so of marrow in the bones; and so of oysters and cockles, which of all the rest are the easiest tried if you have them in pits.

893. Take some seeds, or roots, as onions, &c., and set some of them immediately after the change; and others of the same kind immediately after the full: let them be as like as can be, the earth also the same as near as may be: and therefore best in pots. Let the pots also stand where no rain or sun may come to them, lest the difference of the weather confound the experiment: and then see in what time the seeds set in the increase of the moon come to a certain height; and how they differ from those that are set in the decrease of the moon.

894. It is like, that the brain of man waxeth moister and fuller upon the full of the moon; and therefore it were good that those that have moist brains, and are great drinkers, to take fume of lignum aloes, rosemary, frankincense, &c., about the full of the moon. It is like also, that the humours in men's bodies increase and decrease as the moon doth; and therefore it were good to purge some day or two after the full; for that then the humours will not replenish so soon again.

895. As for the exciting of the motion of the spirits, you must note that the growth of hedges, herbs, hair, &c., is caused from the moon, by exciting of the spirits, as well as by increase of the moisture. But for spirits in particular, the great instance is in lunacies.

896. There may be other secret effects of the influence of the moon, which are not yet brought into observation. It may be, that if it so fall out that the wind be north, or north-east, in the full of the moon, it increaseth cold; and if south, or south-west, it disposeth the air for a good while to warmth and rain; which would be observed.

897. It may be, that children, and young cattle, that are brought forth in the full of the moon, are stronger and larger than those that are brought forth in the wane; and those also which are begotten in the full of the moon: so that it might be good husbandry to put rams and bulls to their females, somewhat before the full of the moon. It may be also, that the eggs laid in the full of the moon breed the better birds; and a number of the like effects which may be brought into observation. *Query* also, whether great thunders and earthquakes be not most in the full of the moon.

Experiment solitary touching vinegar.

898. The turning of wine to vinegar is a kind of putrefaction: and in making of vinegar, they use to set vessels of wine over against the noon sun; which calleth out the more oily spirits, and leaveth the liquor more sour and hard. We also see, that burnt wine is more hard and astringent than wine unburnt. It is said, that cider in navigations under the line ripeneth, when wine or beer soureth. It were good to set a rundlet of verjuice over against the sun in summer, as they do vinegar, to see whether it will ripen and sweeten.

Experiment solitary touching creatures that sleep all winter.

899. There be divers creatures that sleep all winter, as the bear, the hedgehog, the bat, the bee, &c. These all wax fat when they sleep, and egest not. The cause of their fattening during their sleeping time, may be the want of assimilating; for whatsoever assimilateth not to flesh turneth either to sweat or fat. These creatures, for part of their sleeping time, have been observed not to stir at all; and for the other part to stir, but not to remove. And they get warm and close places to sleep in. When the Flemings wintered in Nova Zembla, the bears about the middle of November, went to sleep; and then the foxes began to come forth, which durst not before. It is noted by some of the ancients, that the she-bear breedeth, and lieth in with her young, during that time of rest; and that a bear big with young hath seldom been seen.

Experiment solitary touching the generating of creatures by copulation and putrefaction.

900. Some living creatures are procreated by copulation between male and female: some by putrefaction: and of those which come by putrefaction, many do, nevertheless, afterwards procreate by copulation. For the cause of both generations: first, it is most certain, that the cause of all vivification is a gentle and proportionable heat, working upon a glutinous and yielding substance: for the heat doth bring forth spirit in that substance: and the substance being glutinous produceth two effects; the one, that the spirit is detained, and cannot break forth: the other,

that the matter being gentle and yielding, is driven forwards by the motion of the spirits, after some swelling, into shape and members. Therefore all sperm, all menstruous substance, all matter whereof creatures are produced by putrefaction, have evermore a closeness, lentor, and sequacity. It seemeth, therefore, that the generation by sperm only, and by putrefaction, have two different causes. The first is, for that creatures which have a definite and exact shape, as those have which are procreated by copulation, cannot be produced by a weak and casual heat; nor out of matter which is not exactly prepared according to the species. The second is, for that there is a greater time required for maturation of perfect creatures; for if the time required in vivification be of any length, then the spirit will exhale before the creature be mature; except it be enclosed in a place where it may have continuance of the heat, access of some nourishment to maintain it, and closeness that may keep it from exhaling: and such places are the wombs and matrices of the females. And therefore all creatures made of putrefaction are of more uncertain shape; and are made in shorter time; and need not so perfect an enclosure, though some closeness be commonly required. As for the heathen opinion, which was, that upon great mutations of the world, perfect creatures were first engendered of concretion; as well as frogs, and worms, and flies, and such like, are now; we know it to be vain: but if any such thing should be admitted, discoursing according to sense, it cannot be, except you admit a chaos first, and commixture of heaven and earth. For the frame of the world, once in order, cannot affect it by any excess or casualty.

CENTURY X.

Experiments in consort touching the transmission and influx of immateriate virtues, and the force of imagination.

THE philosophy of Pythagoras, which was full of superstition, did first plant a monstrous imagination, which afterwards was, by the school of Plato and others, watered and nourished. It was, that the world was one entire perfect living creature; insomuch as Apollonius of Tyana, a Pythagorean prophet, affirmed, that the ebbing and flowing of the sea was the respiration of the world, drawing in water as breath, and putting it forth again. They went on, and inferred, that if the world were a living creature, it had a soul and spirit; which also they held, calling it spiritus mundi, the spirit or soul of the world: by which they did not intend God, for they did admit of a Deity besides, but only the soul or essential form of the universe. This foundation being laid, they might build upon it what they would; for in a living creature, though never so great, as for example, in a great whale, the sense and the effects of any one part of the body instantly make a transcursion throughout the whole body: so that by this they did insinuate, that no distance of place, nor want of indisposition of matter, could hinder magical operations; but that, for example, we might here in Europe have sense and feeling of that which was done in China; and likewise we might work any effect without and against matter; and this not holpen by the co-operation of angels or spirits, but only by the unity and harmony of nature. There were some also that stayed not here; but went farther, and held, that if the spirit of man, whom they call the microcosm, do give a fit touch to the spirit of the world, by strong imaginations and beliefs, it might command nature; for Paracelsus, and some darksome authors of magic, do ascribe to imgination exalted, the power of miracle-working faith. With these vast and bottomless follies men have been in part entertained.

But we, that hold firm to the works of God, and to the sense, which is God's lamp, lucerna Dei spiraculum hominis, will inquire with all sobriety and severity, whether there be to be found in the footsteps of nature, any such transmission and influx of immateriate virtues; and what the force of imagination is; either upon the body imaginant, or upon another body: wherein it will be like that labour of Hercules, in purging the stable of Augeas, to separate from superstitious and magical arts and observations, any thing that is clean and pure natural; and not to be either contemned or condemned. And although we shall have occasion to speak of this in more places than one, yet we will now make some entrance thereinto.

Experiments in consort, monitory, touching transmission of spirits, and the force of imagination.

901. Men are to admonished that they do not withdraw credit from operations by transmission of spirits, and force of imaginations, because the effects fail sometimes. For as in infection, and contagion from body to body, as the plague, and the like, it is most certain that the infection is received, many times, by the body passive, but yet is, by the strength and good disposition thereof, repulsed and wrought out, before it be formed into a disease; so much more in impressions from mind to mind, or from spirit to spirit, the impression taketh, but is encountered and overcome by

the mind and spirit, which is passive, before it work any manifest effect. And therefore they work most upon weak minds and spirits; as those of women, sick persons, superstitious and fearful persons, children, and young creatures:

"Nescio quis teneros oculus mihi fascinat agnos:"

The poet speaketh not of sheep, but of lambs. As for the weakness of the power of them upon kings and magistrates, it may be ascribed, besides the main, which is the protection of God over those that execute his place, to the weakness of the imagination of the imaginant: for it is hard for a witch or a sorcerer to put on a belief that they can hurt such persons.

902. Men are to be admonished, on the other side, that they do not easily give place and credit to these operations, because they succeed many times; for the cause of this success is oft to be truly ascribed unto the force of affection and imagination upon the body agent: and then by a secondary means it may work upon a diverse body: as for example, if a man carry a planet's seal, or a ring, or some part of a beast, believing strongly that it will help him to obtain his love; or to keep him from danger of hurt in fight; or to prevail in suit, &c., it may make him more active and industrious: and again, more confident and persisting, than otherwise he would be. Now the great effects that may come of industry and perseverance, especially in civil business, who knoweth not? For we see audacity doth almost bind and mate the weaker sort of minds; and the state of human actions is so variable, that to try things oft, and never to give over, doth wonders: therefore it were a mere fallacy and mistaking to ascribe that to the force of imagination upon another body which is but the force of imagination upon the proper body; for there is no doubt but that imagination and vehement affection work greatly upon the body of the imaginant; as we shall show in due place.

903. Men are to be admonished, that as they are not to mistake the causes of these operations; so much less they are to mistake the fact or effect; and rashly to take that for done which is not done. And therefore, as divers wise judges have prescribed and cautioned, men may not too rashly believe the confessions of witches, nor yet the evidence against them. For the witches themselves are imaginative, and believe oft-times they do that which they do not: and people are credulous in that point, and ready to impute accidents and natural operations to witchcraft. It is worthy the observing, that both in ancient and late times, as in the Thessalian witches, and the meetings of witches that have been recorded by so many late confessions, the great wonders which they tell, of carrying in the air, transforming themselves into other bodies, &c., are still reported to be wrought, not by incantations or ceremonies, but by ointments, and anointing themselves all over. This may justly move a man to think that these fables are the effects of imagination: for it is certain that ointments do all, if they be laid on any thing thick, by stopping of the pores, shut in the vapours, and send them to the head extremely. And for the particular ingredients of those magical ointments, it is like they are opiate and soporiferous. For anointing of the forehead, neck, feet, back-bone, we know, is used for procuring dead sleeps: and if any man say that this effect would be better done by inward potions; answer may be made, that the medicines which go to the ointments are so strong, that if they were used inwards, they would kill those that use them: and therefore they work potently, though outwards.

We will divide the several kinds of the operations by transmission of spirits and imaginations, which will give no small light to the experiments that follow. All operations by transmission of spirits and imagination, have this; that they work at distance, and not at touch; and they are these being distinguished.

904. The first is the transmission or emission of the thinner and more airy parts of bodies; as in odours and infections; and this is, of all the rest, the most corporeal. But you must remember withal, that there be a number of those emissions, both wholesome and unwholesome, that give no smell at all: for the plague, many times when it is taken, giveth no scent at all: and there be many good and healthful airs that do appear by habitation and other proofs, that differ not in smell from other airs. And under this head you may place all imbibitions of air, where the substance is material, odour-like, whereof some nevertheless are strange, and very suddenly diffused; as the alteration which the air receiveth in Egypt, almost immediately, upon the rising of the river of Nilus, whereof we have spoken.

905. The second is the transmission or emission of those things that we call spiritual species; as visibles and sounds: the one whereof we have handled, and the other we shall handle in due place. These move swiftly and at great distance, but then they require a medium well disposed, and their transmission is easily stopped.

906. The third is the emissions which cause attraction of certain bodies at distance, wherein, though the loadstone be commonly placed in the first rank, yet we think good to except it and refer it to another head; but the drawing of amber and jet, and other electric bodies, and the attraction in gold of the spirit of quicksilver at distance; and the attraction of heat at distance; and that of fire to naphtha; and that of some herbs to water, though at distance; and divers others; we shall handle, but yet not under the present title, but under the title of attraction in general.

907. The fourth is the emission of spirits, and immateriate powers and virtues, in those things

which work by the universal configuration and sympathy of the world; not by forms, or celestial influxes, as is vainly taught and received, but by the primitive nature of matter, and the seeds of things. Of this kind is, as we yet suppose, the working of the loadstone, which is by consent with the globe of the earth; of this kind is the motion of gravity, which is by consent of dense bodies with the globe of the earth: of this kind is some disposition of bodies to rotation, and particularly from east to west: of which kind we conceive the main float and refloat of the sea is, which is by consent of the universe, as part of the diurnal motion. These immateriate virtues have this property differing from others; that the diversity of the medium hindereth them not; but they pass through all mediums, yet at determinate distances. And of these we shall speak, as they are incident to several titles.

908. The fifth is, the emission of spirits; and this is the principal in our intention to handle now in this place; namely, the operation of the spirits of the mind of man upon other spirits: and this is of a double nature, the operations of the affections, if they be vehement, and the operation of the imagination, if it be strong. But these two are so coupled, as we shall handle them together; for when an envious or amorous aspect doth infect the spirits of another, there is joined both affection and imagination.

909. The sixth is, the influxes of the heavenly bodies, besides these two manifest ones, of heat and light. But these we will handle where we handle the celestial bodies and motions.

910. The seventh is, the operations of sympathy, which the writers of natural magic have brought into an art or precept: and it is this; that if you desire to superinduce any virtue or disposition upon a person, you should take the living creature in which that virtue is most eminent, and in perfection; of that creature you must take the parts wherein that virtue chiefly is collocated: again, you must take those parts in the time and act when that virtue is most in exercise: and then you must apply it to that part of man wherein that virtue chiefly consisteth. As if you would superinduce courage and fortitude, take a lion or a cock; and take the heart, tooth, or paw of the lion; or the heart or spur of the cock: take those parts immediately after the lion or the cock have been in fight, and let them be worn upon a man's heart or wrist. Of these, and such like sympathies, we shall speak under this present title.

911. The eighth and last is, an emission of immateriate virtues, such as we are a little doubtful to propound, it is so prodigious; but that it is so constantly avouched by many; and we have set it down as a law to ourselves, to examine things to the bottom; and not to receive upon credit or reject upon improbabilities, until there hath passed a due examination. This is the sympathy of individuals; for as there is a sympathy of species, so it may be there is a sympathy of individuals: that is, that in things, or the parts of things that have been once contiguous or entire, there should remain a transmission of virtue from the one to the other: as between the weapon and the wound. Whereupon is blazed abroad the operation of unguentem teli: and so of a piece of lard, or stick of elder, &c., that if part of it be consumed or putrefied, it will work upon the other part severed. Now we will pursue the instances themselves.

Experiments in consort touching emission of spirits in vapour or exhalation, odour-like.

912. The plague is many times taken without manifest sense, as hath been said. And they report, that where it is found, it hath a scent of the smell of a mellow apple; and, as some say, of May-flowers: and it is also received, that smells of flowers that are mellow and luscious, are ill for the plague, as white lilies, cowslips, and hyacinths.

913. The plague is not easily received by such as continually are about them that have the plague; as keepers of the sick, and physicians: nor again by such as take antidotes, either inward, as mithridate, juniper-berries, rue, leaf and seed, &c., or outward, as angelica, zedoary, and the like, in the mouth; tar, galbanum, and the like, in perfume; nor again by old people, and such as are of a dry and cold complexion. On the other side, the plague taketh soonest hold of those that come out of a fresh air, and of those that are fasting, and of children; and it is likewise noted to go in a blood, more than to a stranger.

914. The most pernicious infection, next the plague, is the smell of the jail, when prisoners have been long, and close, and nastily kept; whereof we have had in our time experience twice or thrice; when both the judges that sat upon the jail, and numbers of those that attended the business or were present, sickened upon it, and died. Therefore it were good wisdom, that in such cases the jail were aired before they be brought forth.

915. Out of question, if such foul smells be made by art, and by the hand, they consist chiefly of man's flesh or sweat putrefied; for they are not those stinks which the nostrils straight abhor and expel, that are most pernicious; but such airs as have some similitude with man's body: and so insinuate themselves, and betray the spirits. There may be great danger in using such compositions, in great meetings of people within houses; as in churches, at arraignments, at plays and solemnities, and the like: for poisoning of air is no less dangerous than poisoning of water, which hath been used by the Turks in the wars,

and was used by Emmanuel Comnenus towards the Christians, when they passed through his country to the Holy Land. And these impoisonments of air are the more dangerous in meetings of people, because the much breath of people doth further the reception of the infection; and therefore, where any such thing is feared, it were good those public places were perfumed, before the assemblies.

916. The impoisonment of particular persons by odours, hath been reported to be in perfumed gloves, or the like: and it is like, they mingle the poison that is deadly, which some smells that are sweet, which also maketh it the sooner received. Plagues also have been raised by anointings of the chinks of doors, and the like; not so much by the touch, as for that it is common for men, when they find any thing wet upon their fingers, to put them to their nose; which men therefore should take heed how they do. The best is, that these compositions of infectious airs cannot be made without danger of death to them that make them. But then again, they may have some antidotes to save themselves; so that men ought not to be secure of it.

917. There have been in divers countries great plagues, by the putrefaction of great swarms of grasshoppers and locusts, when they have been dead and cast upon heaps.

918. It happeneth often in mines, that there are damps which kill, either by suffocation, or by the poisonous nature of the mineral: and those that deal much in refining, or other works about metals and minerals, have their brains hurt and stupefied by the metalline vapours. Amongst which is noted, that the spirits of quicksilver either fly to the skull, teeth, or bones: insomuch as gilders use to have a piece of gold in their mouth, to draw the spirits of the quicksilver; which gold afterwards they find to be whitened. There are also certain lakes and pits, such as that of Avernus, that poison birds, as it is said, which fly over them, or men that stay too long about them.

919. The vapour of charcoal or sea-coal, in a close room, hath killed many; and it is the more dangerous, because it cometh without any ill smell, but stealeth on by little and little, inducing only a faintness, without any manifest strangling. When the Dutchmen wintered at Nova Zembla, and that they could gather no more sticks, they fell to make fire of some sea-coal they had, wherewith, at first, they were much refreshed; but a little after they had sat about the fire, there grew a general silence and loathness to speak amongst them: and immediately after, one of the weakest of the company fell down in a swoon: whereupon they doubting what it was, opened their door to let in air, and so saved themselves. The effect, no doubt, is wrought by the inspissation of the air; and so of the breath and spirits. The like ensueth in rooms newly plastered, if a fire be made in them; whereof no less man than the emperor Jovinianus died.

920. Vide the experiment 803, touching the infectious nature of the air, upon the first showers, after a long drought.

921. It hath come to pass, that some apothecaries, upon stamping of colloquintida, have been put into a great scouring by the vapour only.

922. It hath been a practice to burn a pepper they call Guiney-pepper, which hath such a strong spirit, that it provoketh a continual sneezing in those that are in the room.

923. It is an ancient tradition, that bleareyes infect sound eyes; and that a menstruous woman, looking upon a glass, doth rust it: nay, they have an opinion which seemeth fabulous; that menstruous women going over a field or garden, do corn and herbs good by killing the worms.

924. The tradition is no less ancient, that the basilisk killeth by aspect; and that the wolf, if he see a man first, by aspect striketh a man hoarse.

925. Perfumes convenient do dry and strengthen the brain, and stay rheums and defluxions, as we find in fume of rosemary dried, and lignum aloes; and calamus taken at the mouth and nostrils: and no doubt there be other perfumes that do moisten and refresh, and are fit to be used in burning agues, consumptions, and too much wakefulness: such as are rose-water, vinegar, lemon-peel, violets, the leaves of vines sprinkled with a little rose-water, &c.

926. They do use in sudden faintings and swoonings to put a handkerchief with rose-water or a little vinegar to the nose: which gathereth together again the spirits, which are upon point to resolve and fall away.

927. Tobacco comforteth the spirits, and dischargeth weariness, which it worketh partly by opening, but chiefly by the opiate virtue, which condenseth the spirits. It were good therefore to try the taking of fumes by pipes, as they do in tobacco, of other things; as well to dry and comfort, as for other intentions. I wish trial be made of the drying fume of rosemary, and lignum aloes, before mentioned, in pipe; and so of nutmeg, and folium indum, &c.

928. The following of the plough hath been approved for refreshing the spirits and procuring appetite; but to do it in the ploughing for wheat or rye, is not so good, because the earth hath spent her sweet breath in vegetables put forth in summer. It is better therefore to do it when you sow barley. But because ploughing is tied to seasons, it is best to take the air of the earth new turned up, by digging with the spade, or standing by him that diggeth. Gentlewomen may do themselves much good by kneeling upon a cushion, and weeding. And these things you may practise in the best seasons; which is ever the early spring, before the earth putteth forth the vegetables, and in the sweetest earth you can

choose. It would be done also when the dew is a little off the ground, lest the vapour be too moist. I knew a great man that lived long, who had a clean clod of earth brought to him every morning as he sat in his bed: and he would hold his head over it a good pretty while. I commend also, sometimes, in digging of new earth, to pour in some Malmsey or Greek wine, that the vapour of the earth and wine together may comfort the spirits the more: provided always it be not taken for a heathen sacrifice, or libation to the earth.

929. They have in physic use of pomanders, and knots of powders, for drying of rheums, comforting of the heart, provoking of sleep, &c. For though those things be not so strong as perfumes, yet you may have them continually in your hand; whereas perfumes you can take but at times; and besides, there be divers things that breathe better of themselves, than when they come to the fire; as nigella romana, the seed of melanthium, amomum, &c.

930. There be two things which, inwardly used, do cool and condense the spirits; and I wish the same to be tried outwardly in vapours. The one is nitre, which I would have dissolved in Malmsey, or Greek wine, and so the smell of the wine taken; or if you would have it more forcible, pour of it upon a firepan, well heated, as they do rose-water and vinegar. The other is the distilled water of wild poppy, which I wish to be mingled, at half, with rose-water, and so taken with some mixture of a few cloves in a perfuming pan. The like would be done with the distilled water of saffron-flowers.

931. Smells of musk, and amber, and civet, are thought to further venerous appetite; which they may do by the refreshing and calling forth of the spirits.

932. Incense and nidorous smells, such as were of sacrifices, were thought to intoxicate the brain, and to dispose men to devotion: which they may do by a kind of sadness, and contristation of the spirits; and partly also by heating and exalting them. We see that amongst the Jews the principal perfume of the sanctuary was forbidden all common uses.

933. There be some perfumes prescribed by the writers of natural magic, which procure pleasant dreams: and some others, as they say, that procure prophetical dreams; as the seeds of flax, fleawort, &c.

934. It is certain, that odours do, in a small degree, nourish; especially the odour of wine; and we see men an hungered do love to smell hot bread It is related that Democritus, when he lay a dying, heard a woman in the house complain that she should be kept from being at a feast and solemnity, which she much desired to see, because there would be a corpse in the house; whereupon he caused loaves of new bread to be sent for, and opened them, and poured a little wine into them; and so kept himself alive with the odour of them, till the feast was past. I knew a gentleman that would fast, sometimes three or four, yea, five days, without meat, bread, or drink; but the same man used to have continually a great wisp of herbs that he smelled on; and amongst those herbs, some esculent herbs of strong scent; as onions, garlic, leeks, and the like.

935. They do use, for the accident of the mother, to burn feathers and other things of ill odour; and by those ill smells the rising of the mother is put down.

936. There be airs which the physicians advise their patients to remove unto, in consumptions, or upon recovery of long sicknesses; which, commonly, are plain champaigns, but grazing, and not over-grown with heath or the like; or else timber-shades, as in forests, and the like. It is noted also, that groves of bays do forbid pestilent airs: which was accounted a great cause of the wholesome air of Antiochia. There be also some soils that put forth odorate herbs of themselves; as wild thyme, wild marjoram, pennyroyal, camomile; and in which the brier roses smell almost like musk-roses; which, no doubt, are signs that do discover an excellent air.

937. It were good for men to think of having healthful air in their houses; which will never be if the rooms be low roofed, or full of windows and doors; for the one maketh the air close, and not fresh, and the other maketh it exceeding unequal; which is a great enemy to health. The windows also should not be high up to the roof, which is in use for beauty and magnificence, but low. Also stone walls are not wholesome; but timber is more wholesome; and especially brick: nay, it hath been used by some with great success to make their walls thick; and to put a lay of chalk between the bricks, to take away all dampishness.

Experiment solitary touching the emissions of spiritual species which affect the senses.

938. These emissions, as we said before, are handled, and ought to be handled by themselves under their proper titles: that is, visibles and audibles, each apart: in this place it shall suffice to give some general observations common to both. First, they seem to be incorporeal. Secondly, they work swiftly. Thirdly, they work at large distances. Fourthly, in curious varieties. Fifthly, they are not effective of any thing; nor leave no work behind them; but are energies merely: for their working upon mirrors and places of echo doth not alter any thing in those bodies; but it is the same action with the original, only repercussed. And as for the shaking of windows, or rarifying the air by great noises, and the heat caused by burning-glasses: they are rather concomitants of the audible and visible species, than

the effects of them. Sixthly, they seem to be of so tender and weak a nature, as they affect only such a rare and attenuate substance, as is the spirit of living creatures.

Experiments in consort touching the emission of immateriate virtues from the minds and spirits of men, either by affections, or by imaginations, or by other impressions.

939. It is mentioned in some stories, that where children have been exposed, or taken away young from their parents; and that afterwards they have approached to their parents' presence, the parents, though they have not known them, have had a secret joy or other alteration thereupon.

940. There was an Egyptian soothsayer, that made Antonius believe, that his genius, which otherwise, was brave and confident, was, in the presence of Octavianus Cæsar, poor and cowardly; and therefore, he advised him to absent himself as much as he could, and remove far from him. This soothsayer was thought to be suborned by Cleopatra, to make him live in Egypt, and other remote places from Rome. Howsoever, the conceit of a predominant or mastering spirit of one man over another, is ancient, and received still, even in vulgar opinion.

941. There are conceits, that some men that are of an ill and melancholy nature, do incline the company into which they come to be sad and ill-disposed; and contrariwise, that others that are of a jovial nature, do dispose the company to be merry and cheerful. And again, that some men are lucky to be kept company with and employed; and others unlucky. Certainly, it is agreeable to reason, that there are at the least some light effluxions from spirit to spirit, when men are in presence one with another, as well as from body to body.

942. It hath been observed, that old men who have loved young company, and been conversant continually with them, have been of long life; their spirits, as it seemeth, being recreated by such company. Such were the ancient sophists and rhetoricians; which ever had young auditors and disciples; as Georgias, Protagoras, Isocrates, &c., who lived till they were a hundred years old. And so likewise did many of the grammarians and school-masters; such as was Orbilius, &c.

943. Audacity and confidence doth, in civil business, so great effects, as a man may reasonably doubt, that besides the very daring, and earnestness, and persisting, and importunity, there should be some secret binding, and stooping of other men's spirits to such persons.

944. The affections, no doubt, do make the spirits more powerful and active; and especially those affections which draw the spirits into the eyes: which are two; love, and envy, which is called oculus malus. As for love, the Platonists, some of them, go so far as to hold that the spirit of the lover doth pass into the spirits of the person loved; which causeth the desire of return into the body whence it was emitted; whereupon followeth that appetite of contact and conjunction which is in lovers. And this is observed likewise, that the aspects which procure love, are not gazings, but sudden glances and dartings of the eye, as for envy, that emitteth some malign and poisonous spirit, which taketh hold of the spirit of another: and is likewise of greatest force when the cast of the eye is oblique. It hath been noted also, that it is most dangerous when an envious eye is cast upon persons in glory, and triumph, and joy. The reason whereof is, for that at such times the spirits come forth most into the outward parts, and so meet the percussion of the envious eye more at hand: and therefore it hath been noted, that after great triumphs, men have been ill-disposed for some days following. We see the opinion of fascination is ancient, for both effects; of procuring love; and sickness caused by envy: and fascination is ever by the eye. But yet if there be any such infection from spirit to spirit, there is no doubt but that it worketh by presence, and not by the eye alone: yet most forcibly by the eye.

945. Fear and shame are likewise infective; for we see that the starting of one will make another ready to start: and when one man is out of countenance in a company, others do likewise blush in his behalf.

Now we will speak of the force of imagination upon other bodies, and of the means to exalt and strengthen it. Imagination, in this place, I understand to be, the representation of an individual thought. Imagination is of three kinds: the first joined with belief of that which is to come: the second joined with memory of that which is past: and the third is of things present, or as if they were present: for I comprehend in this, imaginations feigned, and at pleasure, as if one should imagine such a man to be in the vestments of a pope, or to have wings. I single out, for this time, that which is with [illegible] belief of that which is to come. The inquisition of this subject in our way, which is by induction, is wonderful hard: for the things that are reported are full of fables; and new experiments can hardly be made, but with extreme caution, for the reason which we will hereafter declare.

The power of imagination is of three kinds; the first upon the body of the imaginant, including likewise the child in the mother's womb; the second is, the power of it upon dead bodies, as plants, wood, stone, metal, &c.; the third is, the power of it upon the spirits of men and living creatures: and with this last we will only meddle.

The problem therefore is, whether a man constantly and strongly believing that such a thing

shall be, as that such an one will love him, or that such an one will grant him his request, or such an one shall recover a sickness, or the like, it doth help any thing to the effecting of the thing itself. And here again we must warily distinguish; for it is not meant, as hath been partly said before, that it should help by making a man more stout, or more industrious, in which kind a constant belief doth much, but merely by a secret operation, or binding, or changing the spirit of another: and in this it is hard, as we began to say, to make any new experiment; for I cannot command myself to believe what I will, and so no trial can be made. Nay, it is worse; for whatsoever a man imagineth doubtingly, or with fear, must needs do hurt, if imagination have any power at all; for a man representeth that oftener that he feareth, than the contrary.

The help therefore is, for a man to work by another, in whom he may create belief, and not by himself; until himself have found by experience, that imagination doth prevail; for then experience worketh in himself belief; if the belief that such a thing shall be, be joined with a belief that his imagination may procure it.

946. For example: I related one time to a man that was curious and vain enough in these things, that I saw a kind of juggler, that had a pair of cards, and would tell a man what card he thought. This pretended learned man told me, it was a mistaking in me; "for," said he, "it was not the knowledge of the man's thought, for that is proper to God, but it was the enforcing of a thought upon him, and binding his imagination by a stronger, that he could think no other card." And thereupon he asked me a question or two, which I thought he did but cunningly, knowing before what used to be the feats of the juggler. "Sir," said he, "do you remember whether he told the card the man thought, himself, or bade another to tell it?" I answered, as was true, that he bade another tell it. Whereunto he said, "So I thought: for," said he, "himself could not have put on so strong an imagination; but by telling the other the card, who believed that the juggler was some strange man, and could do strange things, that other man caught a strong imagination." I hearkened unto him, thinking for a vanity he spoke prettily. Then he asked me another question: saith he, "Do you remember, whether he bade the man think the card first, and afterwards told the other man in his ear what he should think; or else that he did whisper first in the man's ear that should tell the card, telling that such a man should think such a card, and after bade the man think a card?" I told him, as was true; that he did first whisper the man in the ear, that such a man should think such a card: upon this the learned man did much exult and please himself, saying; "Lo, you may see that my opinion is right; for if the man had thought first, his thought had been fixed; but the other imagining first, bound his thought." Which, though it did somewhat sink with me, yet I made it lighter than I thought, and said, I thought it was confederacy between the juggler and the two servants: though, indeed, I had no reason so to think, for they were both my father's servants, and he had never played in the house before. The juggler also did cause a garter, to be held up, and took upon him to know, that such a one should point in such a place of the garter, as it should be near so many inches to the longer end, and so many to the shorter; and still he did it, by first telling the imaginer, and after bidding the actor think.

Having told this relation, not for the weight thereof, but because it doth handsomely open the nature of the question, I return to that I said, that experiments of imagination must be practised by others, and not by a man's self. For there be three means to fortify belief: the first is experience; the second is reason; and the third is authority: and that of these which is far the most potent, is authority; for belief upon reason, or experience will stagger.

947. For authority, it is of two kinds, belief in an art, and belief in a man. And for things of belief in an art, a man may exercise them by himself; but for belief in a man, it must be by another. Therefore if a man believe in astrology, and find a figure prosperous, or believe in natural magic, and that a ring with such a stone, or such a piece of a living creature carried, will do good, it may help his imagination: but the belief in a man is far the most active. But howsoever, all authority must be out of a man's self, turned, as was said, either upon an art, or upon a man: and where authority is from one man to another, there the second must be ignorant, and not learned, or full of thoughts; and such are, for the most part, all witches and superstitious persons, whose beliefs, tied to their teachers and traditions, are no whit controlled either by reason or experience; and upon the same reason, in magic, they use for the most part boys and young people, whose spirits easiliest take belief and imagination.

Now to fortify imagination, there be three ways: the authority whence the belief is derived; means to quicken and corroborate the imagination: and means to repeat it and refresh it.

948. For the authority, we have already spoken: as for the second, namely, the means to quicken and corroborate the imagination; we see what hath been used in magic, if there be in those practices any thing that is purely natural, as vestments, characters, words, seals; some parts of plants, or living creatures: stones, choice of the hour, gestures and motions; also incenses and odours, choice of society, which increaseth imagination; diets and preparations for some time before. And for words, there have been ever used,

either barbarous words, of no sense, lest they should disturb the imagination, or words of similitude, that may second and feed the imagination; and this was ever as well in heathen charms, as in charms of latter times. There are used also Scripture words; for that the belief that religious texts and words have power, may strengthen the imagination. And for the same reason, Hebrew words, which amongst us is counted the holy tongue, and the words more mystical, are often used.

949. For the refreshing of the imagination, which was the third means of exalting it, we see the practices of magic, as in images of wax, and the like, that should melt by little and little; or some other things buried in muck, that should putrefy by little and little; or the like; for so oft as the imaginant doth think of those things, so oft doth he represent to his imagination the effect of that he desireth.

950. If there be any power in imagination, it is less credible that it should be so incorporeal, and immateriate a virtue, as to work at great distances, or through all mediums, or upon all bodies: but that the distance must be competent, the medium not adverse, and the body apt and proportionate. Therefore if there be any operation upon bodies in absence by nature, it is like to be conveyed from man to man, as fame is; as if a witch, by imagination, should hurt any afar off, it cannot be naturally; but by working upon the spirit of some that cometh to the witch; and from that party upon the imagination of another; and so upon another; till it come to one that hath resort to the party intended; and so by him to the party intended himself. And although they speak, that it sufficeth to take a point, or a piece of the garment, or the name of the party, or the like; yet there is less credit to be given to those things, except it be by working of evil spirits.

The experiments, which may certainly demonstrate the power of imagination upon other bodies, are few or none: for the experiments of witchcraft are no clear proofs; for that they may be by a tacit operation of malign spirits: we shall therefore be forced, in this inquiry, to resort to new experiments; wherein we can give only directions of trials, and not any positive experiments. And if any man think that we ought to have stayed till we had made experiment of some of them ourselves, as we do commonly in other titles, the truth is, that these effects of imagination upon other bodies have so little credit with us, as we shall try them at leisure: but in the mean time we will lead others the way.

951. When you work by the imagination of another, it is necessary that he, by whom you work, have a precedent opinion of you that you can do strange things; or that you are a man of art, as they call it; for else the simple affirmation to another, that this or that shall be, can work but a weak impression in his imagination.

952. It were good, because you cannot discern fully of the strength of imagination in one man more than another, that you did use the imagination of more than one, that so you may light upon a strong one. As if a physician should tell three or four of his patient's servants, that their master shall surely recover.

953. The imagination of one that you shall use, such is the variety of men's minds, cannot be always alike constant and strong; and if the success follow not speedily, it will faint and lose strength. To remedy this, you must pretend to him, whose imagination you use, several degrees of means, by which to operate: as to prescribe him that every three days, if he find not the success apparent, he do use another root, or part of a beast, or ring, &c., as being of more force: and if that fail, another; and if that, another, till seven times. Also you must prescribe a good large time for the effect you promise; as if you should tell a servant of a sick man that his master shall recover, but it will be fourteen days ere he findeth it apparently, &c. All this to entertain the imagination, that it waver less.

954. It is certain, that potions, or things taken into the body; incenses and perfumes taken at the nostrils; and ointments of some parts, do naturally work upon the imagination of him that taketh them. And therefore it must needs greatly co-operate with the imagination of him whom you use, if you prescribe him, before he do use the receipt for the work which he desireth, that he do take such a pill, or a spoonful of liquor; or burn such an incense; or anoint his temples, or the soles of his feet, with such an ointment or oil: and you must choose, for the composition of such pill, perfume, or ointment, such ingredients as do make the spirits a little more gross or muddy; whereby the imagination will fix the better.

955. The body passive, and to be wrought upon, I mean not of the imaginant, is better wrought upon, as hath been partly touched, at some times than at others: as if you should prescribe a servant about a sick person, whom you have possessed that his master shall recover, when his master is fast asleep, to use such a root, or such a root. For imagination is like to work better upon sleeping men, than men awake; as we shall show when we handle dreams.

956. We find in the art of memory, that images visible work better than other conceits: as if you would remember the word philosophy, you shall more surely do it, by imagining, that such a man, for men are best places, is reading upon Aristotle's Physics; than if you should imagine him to say, "I'll go study philosophy." And therefore this observation would be translated to the subject we now speak of: for the more lustrous the imagination is, it filleth and fixeth the better. And therefore I conceive, that you shall, in that experiment whereof we spake before, of binding of thoughts,

less fail, if you tell one that such an one shall name one of twenty men, than if it were one of twenty cards. The experiment of binding of thoughts would be diversified and tried to the full: and you are to note, whether it hit for the most part, though not always.

957. It is good to consider, upon what things imagination hath most force: and the rule, as I conceive, is, that it hath most force upon things that have the lightest and easiest motions. And therefore above all, upon the spirits of men: and in them, upon such affections as move lightest; as upon procuring of love; binding of lust, which is ever with imagination; upon men in fear; or men in irresolution; and the like. Whatsoever is of this kind would be throughly inquired. Trials likewise would be made upon plants, and that diligently: as if you should tell a man, that such a tree would die this year; and will him at these and these times to go unto it, to see how it thriveth. As for inanimate things, it is true that the motions of shuffling of cards, or casting of dice, are very light motions: and there is a folly very usual, that gamesters imagine, that some that stand by them bring them ill luck. There would be trial also made, of holding a ring by a thread in a glass, and telling him that holdeth it, before, that it shall strike so many times against the side of the glass, and no more; or of holding a key between two men's fingers, without a charm; and to tell those that hold it, that at such a name it shall go off their fingers; for these two are extreme light motions. And howsoever I have no opinion of these things, yet so much I conceive to be true; that strong imagination hath more force upon things living, or that have been living, than things merely inanimate: and mere force likewise upon light and subtile motions, than upon motions vehement or ponderous.

958. It is an usual observation, that if the body of one murdered be brought before the murderer, the wounds will bleed afresh. Some do affirm, that the dead body, upon the presence of the murderer, hath opened the eyes; and that there have been such like motions, as well where the parties murdered have been strangled or drowned, as where they have been killed by wounds. It may be, that this participateth of a miracle, by God's just judgment, who usually bringeth murders to light: but if it be natural, it must be referred to imagination.

959. The tying of the point upon the day of marriage, to make men impotent towards their wives, which, as we have formerly touched, is so frequent in Zant and Gascony, if it be natural, must be referred to the imagination of him that tieth the point. I conceive it to have the less affinity with witchcraft, because not peculiar persons only, such as witches are, but anybody may do it.

Experiments in consort touching the secret virtue of sympathy and antipathy.

960. There be many things that work upon the spirits of man by secret sympathy and antipathy: the virtues of precious stones worn, have been anciently and generally received, and curiously assigned to work several effects. So much is true: that stones have in them fine spirits, as appeareth by their splendour; and therefore they may work by consent upon the spirits of men, to comfort and exhilarate them. Those that are the best, for that effect, are the diamond, the emerald, the jacinth oriental, and the gold stone, which is the yellow topaz. As for their particular properties, there is no credit to be given to them. But it is manifest, that light, above all things, excelleth in comforting the spirits of men: and it is very probable, that light varied doth the same effect, with more novelty. And this is one of the causes why precious stones comfort. And therefore it were good to have tincted lanterns, or tincted screens of glass coloured into green, blue, carnation, crimson, purple, &c., and to use them with candles in the night. So likewise to have round glasses, not only of glass coloured through, but with colours laid between crystals, with handles to hold in one's hand. Prisms are also comfortable things. They have of Paris-work, looking-glasses, bordered with broad borders of small crystal, and great counterfeit precious stones, of all colours, that are most glorious and pleasant to behold; especially in the night. The pictures of Indian feathers are likewise comfortable and pleasant to behold. So also fair and clear pools do greatly comfort the eyes and spirits, especially when the sun is not glaring, but overcast; or when the moon shineth.

961. There be divers sorts of bracelets fit to comfort the spirits; and they be of three intentions; refrigerant, corroborant, and aperient. For refrigerant, I wish them to be of pearl, or of coral, as is used; and it hath been noted that coral, if the party that weareth it be indisposed, will wax pale; which I believe to be true, because otherwise distemper of heat will make coral lose colour. I commend also beads, or little plates of lapis lazuli; and beads of nitre, either alone, or with some cordial mixture.

962. For corroboration and confortation, take such bodies as are of astringent quality, without manifest cold. I commend bead-amber, which is full of astriction, but yet is unctuous, and not cold; and is conceived to impinguate those that wear such beads; I commend also beads of hartshorn and ivory; which are of the like nature; also orange beads; also beads of lignum aloes, macerated first in rose-water, and dried.

963. For opening, I commend beads, or pieces of the roots of carduus benedictus also; of the

roots of piony the male; and of orrice; and of calamus aromaticus; and of rue.

964. The cramp, no doubt, cometh of contraction of sinews; which is manifest, in that it cometh either by cold or dryness; as after consumptions, and long agues; for cold and dryness do, both of them, contract and corrugate. We see also, that chafing a little above the place in pain, easeth the cramp; which is wrought by the dilatation of the contracted sinews by heat. There are in use, for the prevention of the cramp, two things; the one rings of sea-horse teeth worn upon the fingers; the other bands of green periwinkle, the herb, tied about the calf of the leg, or the thigh, &c., where the cramp useth to come. I do find this the more strange, because neither of these have any relaxing virtue, but rather the contrary. I judge, therefore, that their working is rather upon the spirits, within the nerves, to make them strive less, than upon the bodily substance of the nerves.

965. I would have trial made of two other kinds of bracelets, for comforting the heart and spirits: the one of the trochisk of vipers, made into little pieces of beads; for since they do great good inwards, especially for pestilent agues, it is like they will be effectual outwards; where they may be applied in greater quantity. There would be trochisk likewise made of snakes; whose flesh dried is thought to have a very opening and cordial virtue. The other is, of beads made of the scarlet powder, which they call kermes; which is the principal ingredient in their cordial confection alkermes: the beads would be made up with ambergrease, and some pomander.

966. It hath been long received, and confirmed by divers trials, that the root of the male-piony dried, tied to the neck, doth help the falling sickness: and likewise the incubus, which we call the mare. The cause of both these diseases, and especially of the epilepsy from the stomach, is the grossness of the vapours which rise and enter into the cells of the brain: and therefore the working is by extreme and subtile attenuation; which that simple hath. I judge the like to be in castoreum, musk, rue-seed, agnus castus seed, &c.

967. There is a stone which they call the blood-stone, which worn is thought to be good for them that bleed at the nose: which, no doubt, is by astriction and cooling of the spirits. *Query*, if the stone taken out of the toad's head be not of the like virtue; for the toad loveth shade and coolness.

968. Light may be taken from the experiment of the horse-tooth ring, and the garland of periwinkle, how that those things which assuage the strife of the spirits, do help diseases contrary to the intention desired: for in the curing of the cramp, the intention is to relax the sinews; but the contraction of the spirits, that they strive less, is the best help: so to procure easy travails of women, the intention is to bring down the child; but the best help is, to stay the coming down too fast: whereunto, they say, the toad-stone likewise helpeth. So in pestilent fevers, the intention is to expel the infection by sweat and evaporation: but the best means to do it is by nitre diascordium, and other cool things, which do for a time arrest the expulsion, till nature can do it more quietly. For as one saith prettily; "In the quenching of the flame of a pestilent ague, nature is like people that come to quench the fire of a house; which are so busy, as one of them letteth another." Surely it is an excellent axiom, and of manifold use, that whatsoever appeaseth the contention of the spirits, furthereth their action.

969. The writers of natural magic commend the wearing of the spoil of a snake, for preserving of health. I doubt it is but a conceit; for that the snake is thought to renew her youth, by casting her spoil. They might as well take the beak of an eagle, or a piece of a hart's horn, because those renew.

970. It hath been anciently received, for Pericles the Athenian used it, and it is yet in use, to wear little bladders of quicksilver, or tablets of arsenic, as preservatives against the plague: not, as they conceive, for any comfort they yield to the spirits, but for that being poisons themselves, they draw the venom to them from the spirits.

971. Vide the experiments 95, 96, and 97, touching the several sympathies and antipathies for medicinal use.

972. It is said, that the guts or skin of a wolf, being applied to the belly, do cure the colic. It is true, that the wolf is a beast of great edacity and digestion; and so it may be the parts of him comfort the bowels.

973. We see scarecrows are set up to keep birds from corn and fruit; it is reported by some, that the head of a wolf, whole, dried, and hanged up in a dove-house, will scare away vermin; such as are weasels, pole-cats, and the like. It may be the head of a dog will do as much; for those vermin with us, know dogs better than wolves.

974. The brains of some creatures, when their heads are roasted, taken in wine, are said to strengthen the memory: as the brains of hares, brains of hens, brains of deers, &c. And it seemeth to be incident to the brains of those creatures that are fearful.

975. The ointment that witches use, is reported to be made of the fat of children digged out of their graves; of the juices of smallage, wolf-bane, and cinque-foil, mingled with the meal of fine wheat. But I suppose, that the soporiferous medicines are likest to do it; which are henbane, hemlock mandrake, moonshade, tobacco, opium, saffron, poplar leaves, &c.

976. It is reported by some, that the affections

of beasts when they are in strength do add some virtue unto inanimate things; as that the skin of a sheep devoured by a wolf, moveth itching; that a stone bitten by a dog in anger, being thrown at him, drunk in powder, provoketh choler.

977. It hath been observed, that the diet of women with child doth work much upon the infant; as if the mother eat quinces much, and coriander-seed, the nature of both which is to repress and stay vapours that ascend to the brain, it will make the child ingenious; and on the contrary side, if the mother eat much onions or beans, or such vaporous food; or drink wine or strong drink immoderately; or fast much; or be given to much musing; all which send or draw vapours to the head: it endangereth the child to become lunatic, or of imperfect memory: and I make the same judgment of tobacco often taken by the mother.

978. The writers of natural magic report, that the heart of an ape, worn near the heart, comforteth the heart, and increaseth audacity. It is true that the ape is a merry and bold beast. And that the same heart likewise of an ape, applied to the neck or head, helpeth the wit; and is good for the falling sickness: the ape also is a witty beast, and hath a dry brain: which may be some cause of attenuation of vapours in the head. Yet it is said to move dreams also. It may be the heart of man would do more, but that it is more against men's minds to use it; except it be in such as wear the relics of saints.

979. The flesh of a hedge-hog, dressed and eaten, is said to be a great drier: it is true that the juice of a hedge-hog must needs be harsh and dry, because it putteth forth so many prickles: for plants also that are full of prickles are generally dry; as briers, thorns, berberries: and therefore the ashes of a hedge-hog are said to be a great desiccative of fistulas.

980. Mummy hath great force in stanching of blood, which, as it may be ascribed to the mixture of balms that are glutinous; so it may also partake of a secret propriety, in that the blood draweth man's flesh. And it is approved that the moss which groweth upon the skull of a dead man unburied, will stanch blood potently: and so do the dregs, or powder of blood, severed from the water, and dried.

981. It hath been practised, to make white swallows, by anointing of the eggs with oil. Which effect may be produced, by the stopping of the pores of the shell, and making the juice that putteth forth the feathers afterwards more penurious. And it may be, the anointing of the eggs will be as effectual as the anointing of the body, of which vide the experiment 93.

982. It is reported, that the white of an egg, or blood, mingled with salt-water, doth gather the saltness, and maketh the water sweeter. This may be by adhesion; as in the sixth experiment of clarification: it may be also, that blood, and the white of an egg, which is the matter of a living creature, have some sympathy with salt: for all life hath a sympathy with salt. We see that salt laid to a cut finger healeth it; so as it seemeth salt draweth blood, as well as blood draweth salt.

983. It hath been anciently received, that the sea air hath an antipathy with the lungs, if it cometh near the body, and erodeth them. Whereof the cause is conceived to be, a quality it hath of heating the breath and spirits, as cantharides have upon the watery parts of the body, as urine and hydropical water. And it is a good rule, that whatsoever hath an operation upon certain kinds of matters, that, in man's body, worketh most upon those parts wherein that kind of matter aboundeth.

984. Generally, that which is dead, or corrupted, or excerned, hath antipathy with the same thing when it is alive, and when it is sound; and with those parts which do excern: as a carcase of man is most infectious and odious to man; a carrion of a horse to a horse, &c.; purulent matter of wounds, and ulcers, carbuncles, pocks, scabs, leprosy, to sound flesh, and the excrement of every species to that creature that excerneth them: but the excrements are less pernicious than the corruptions.

985. It is a common experience, that dogs know the dog-killer; when, as in times of infection, some petty fellow is sent out to kill the dogs; and that though they have never seen him before, yet they will all come forth, and bark, and fly at him.

986. The relations touching the force of imagination, and the secret instincts of nature, are so uncertain, as they require a great deal of examination ere we conclude upon them. I would have it first thoroughly inquired, whether there be any secret passages of sympathy between persons of near blood, as parents, children, brothers, sisters, nurse-children, husbands, wives, &c. There be many reports in history, that upon the death of persons of such nearness, men have had an inward feeling of it. I myself remember, that being in Paris, and my father dying in London, two or three days before my father's death, I had a dream, which I told to divers English gentlemen, that my father's house in the country was plastered all over with black mortar. There is an opinion abroad, whether idle or no I cannot say, that loving and kind husbands have a sense of their wives breeding children, by some accident in their own body.

987. Next to those that are near in blood, there may be the like passage, and instincts of nature between great friends and enemies: and sometimes the revealing is unto another person, and not to the party himself. I remember Philippus Commineus, a grave writer, reporteth, that the Archbishop of Vienna, a reverend prelate, said

one day after mass to King Lewis the Eleventh of France: "Sir, your mortal enemy is dead;" what time Duke Charles of Burgundy was slain at the battle of Granson against the Switzers. Some trial also would be made, whether pact or agreement do any thing; as if two friends should agree, that such a day in every week, they, being in far distant places, should pray one for another, or should put on a ring or tablet one for another's sake; whether if one of them should break their vow and promise, the other should have any feeling of it in absence.

988. If there be any force in imaginations and affections of singular persons, it is probable the force is much more in the joint imaginations and affections of multitudes: as if a victory should be won or lost in remote parts, whether is there not some sense thereof in the people whom it concerneth, because of the great joy or grief that many men are possessed with at once? Pius Quintus, at the very time when that memorable victory was won by the Christians against the Turks, at the naval battle of Lepanto, being then hearing of causes in consistory, brake off suddenly, and said to those about him, "It is now more time we should give thanks to God, for the great victory he hath granted us against the Turks:" it is true, that victory had a sympathy with his spirit; for it was merely his work to conclude that league. It may be that revelation was divine: but what shall we say then to a number of examples amongst the Grecians and Romans? where the people being in theatres at plays, have had news of victories and overthrows, some few days before any messenger could come.

It is true, that that may hold in these things, which is the general root of superstition: namely, that men observe when things hit, and not when they miss; and commit to memory the one, and forget and pass over the other. But touching divination, and the misgiving of minds, we shall speak more when we handle in general the nature of minds, and souls, and spirits.

989. We have given formerly some rules of imagination; and touching the fortifying of the same. We have set down also some few instances and directions, of the force of imagination upon beasts, birds, &c., upon plants, and upon inanimate bodies: wherein you must still observe, that your trials be upon subtle and light motions, and not the contrary; for you will sooner by imagination bind a bird from singing than from eating or flying: and I leave it to every man to choose experiments which himself thinketh most commodious, giving now but a few examples of every of the three kinds.

990. Use some imaginant, observing the rules formerly prescribed, for binding of a bird from singing, and the like of a dog from barking. Try also the imagination of some, whom you shall accommodate with things to fortify it, in cocks fights, to make one cock more hardy, and the other more cowardly. It would be tried also in flying of hawks, or in coursing of a deer, or hare, with greyhounds: or in horse-races, and the like comparative motions; for you may sooner by imagination quicken or slack a motion, than raise or cease it; as it is easier to make a dog go slower than to make him stand still, that he may not run

991. In plants also you may try the force of imagination upon the lighter sort of motions: as upon the sudden fading, or lively coming up of herbs, or upon their bending one way or other; or upon their closing and opening, &c.

992. For inanimate things, you may try the force of imagination, upon staying the working of beer when the barm is put in, or upon the coming of butter or cheese, after the churning, or the rennet be put in.

993. It is an ancient tradition everywhere alleged, for example of secret proprieties and influxes, that the torpedo marina, if it be touched with a long stick, doth stupefy the hand of him that toucheth it. It is one degree of working at distance, to work by the continuance of a fit medium, as sound will be conveyed to the ear by striking upon a bow-string, if the horn of the bow be held to the ear.

994. The writers of natural magic do attribute much to the virtues that come from the parts of living creatures, so as they be taken from them, the creatures remaining still alive: as if the creatures still living did infuse some immateriate virtue and vigour into the part severed. So much may be true; that any part taken from a living creature newly slain, may be of greater force than if it were taken from the like creature dying of itself, because it is fuller of spirit.

995. Trial would be made of the like parts of individuals in plants and living creatures; as to cut off a stock of a tree, and to lay that which you cut off to putrefy, to see whether it will decay the rest of the stock: or if you should cut off part of the tail or leg of a dog or a cat, and lay it to putrefy, and so see whether it will fester, or keep from healing, the part which remaineth.

996. It is received, that it helpeth to continue love, if one wear a ring, or a bracelet, of the hair of the party beloved. But that may be by the exciting of the imagination: and perhaps a glove, or other like favour, may as well do it.

997. The sympathy of individuals, that have been entire, or have touched, is of all others the most incredible; yet according unto our faithful manner of examination of nature, we will make some little mention of it. The taking away of warts, by rubbing them with somewhat that afterwards is put to waste and consume, is a common experiment; and I do apprehend it the rather because of my own experience. I had from my childhood a wart upon one of my fingers: afterwards, when I was about sixteen years old, being

then at Paris, there grew upon both my hands a number of warts, at the least an hundred, in a month's space. The English ambassador's lady, who was a woman far from superstition, told me one day, she would help me away with my warts: whereupon she got a piece of lard with the skin on, and rubbed the warts all over with the fat side; and amongst the rest, that wart which I had had from my childhood: then she nailed the piece of lard, with the fat towards the sun, upon a post of her chamber window, which was to the south. The success was, that within five weeks' space all the warts went quite away: and that wart which I had so long endured, for company. But at the rest I did little marvel, because they came in a short time, and might go away in a short time again; but the going away of that which had stayed so long doth yet stick with me. They say the like is done by the rubbing of warts with a green elder stick, and then burying the stick to rot in muck. It would be tried with corns and wens, and such other excrescences. I would have it also tried with some parts of living creatures that are nearest the nature of excrescences; as the combs of cocks, the spurs of cocks, the horns of beasts, &c. And I would have it tried both ways; both by rubbing those parts with lard, or elder, as before, and by cutting off some piece of those parts, and laying it to consume: to see whether it will work any effect towards the consumption of that part which was once joined with it.

998. It is constantly received and avouched, that the anointing of the weapon that maketh the wound, will heal the wound itself. In this experiment, upon the relation of men of credit, though myself, as yet, am not fully inclined to believe it, you shall note the points following: first, the ointment wherewith this is done is made of divers ingredients; whereof the strangest and hardest to come by, are the moss upon the skull of a dead man unburied, and the fats of a boar and a bear killed in the act of generation. These two last I could easily suspect to be prescribed as a starting-hole: that if the experiment proved not, it might be pretended that the beasts were not killed in the due time; for as for the moss, it is certain there is great quantity of it in Ireland, upon slain bodies, laid on heaps unburied. The other ingredients are, the blood-stone in powder, and some other things, which seem to have a virtue to stanch blood; as also the moss hath. And the description of the whole ointment is to be found in the chymical dispensatory of Crollius. Secondly, the same kind of ointment applied to the hurt itself worketh not the effect; but only applied to the weapon. Thirdly, which I like well, they do not observe the confecting of the ointment under any certain constellation; which commonly is the excuse of magical medicines when they fail, that they were not made under a fit figure of heaven. Fourthly, it may be applied to the weapon, though the party hurt be at great distance. Fifthly, it seemeth the imagination of the party to be cured is not needful to concur; for it may be done without the knowledge of the party wounded: and thus much has been tried, that the ointment, for experiment's sake, hath been wiped off the weapon, without the knowledge of the party hurt, and presently the party hurt hath been in great rage of pain, till the weapon was re-anointed. Sixthly, it is affirmed, that if you cannot get the weapon, yet if you put an instrument of iron or wood, resembling the weapon, into the wound, whereby it bleedeth, the anointing of that instrument will serve and work the effect. This I doubt should be a device to keep this strange form of cure in request and use; because many times you cannot come by the weapon itself. Seventhly, the wound must be at first washed clean with white wine, or the party's own water; and then bound up close in fine linen, and no more dressing renewed till it be whole. Eighthly, the sword itself must be wrapped up close, as far as the ointment goeth, that it taketh no wind. Ninthly, the ointment, if you wipe it off from the sword and keep it, will serve again; and rather increase in virtue than diminish. Tenthly, it will cure in far shorter time than ointments of wounds commonly do. Lastly, it will cure a beast, as well as a man, which I like best of all the rest, because it subjecteth the matter to an easy trial.

Experiment solitary touching secret properties.

999. I would have men know, that though I reprehend the easy passing over the causes of things, by ascribing them to secret and hidden virtues, and proprieties, for this hath arrested and laid asleep all true inquiry and indications, yet I do not understand, but that in the practical part of knowledge, much will be left to experience and probation, whereunto indication cannot so fully reach: and this not only in specie, but in individuo. So in physic; if you will cure the jaundice, it is not enough to say, that the medicine must not be cooling; for that will hinder the opening which the disease requireth: that it must not be hot; for that will exasperate choler: that it must go to the gall; for there is the obstruction which causeth the disease, &c. But you must receive from experience that powder of Chamœpytis, or the like, drunk in beer, is good for the jaundice. So again a wise physician doth not continue still the same medicine to a patient; but he will vary, if the first medicine doth not apparently succeed: for of those remedies that are good for the jaundice, stone, agues, &c., that will do good in one body which will not do good in another; according to the correspondence the medicine hath to the individual body.

Experiment solitary touching the general sympathy of men's spirits.

1000. The delight which men have in popularity, fame, honour, submission, and subjection of other men's minds, wills, or affections, although these things may be desired for other ends, seemeth to be a thing in itself without contemplation of consequence, grateful and agreeable to the nature of man. This thing, surely, is not without some signification, as if all spirits and souls of men came forth out of one divine limbus; else why should men be so much affected with that which others think or say? The best temper of minds desireth good name and true honour: the lighter, popularity and applause: the more depraved, subjection and tyranny; as is seen in great conquerors and troublers of the world: and yet more in arch-heretics; for the introduction of new doctrines is likewise an affectation of tyranny over the understandings and beliefs of men.

TRACTS RELATING TO SCOTLAND.

A BRIEF DISCOURSE

OF THE

HAPPY UNION OF THE KINGDOMS OF ENGLAND AND SCOTLAND

DEDICATED IN PRIVATE TO HIS MAJESTY.*

I DO not find it strange, excellent king, that when Heraclitus, he that was surnamed the obscure, had set forth a certain book, which is not now extant, many men took it for a discourse of nature, and many others took it for a treatise of policy. For there is a great affinity and consent between the rules of nature, and the true rules of policy: the one being nothing else but an order in the government of the world: and the other an order in the government of an estate. And therefore the education and erudition of the kings of Persia was in a science which was termed by a name then of great reverence, but now degenerate and taken in the ill part. For the Persian magic, which was the secret literature of their kings, was an application of the contemplations and observations of nature unto a sense politic; taking the fundamental laws of nature, and the branches and passages of them, as an original or first model, whence to take and describe a copy and imitation for government.

After this manner the foresaid instructors set before their kings the examples of the celestial bodies, the sun, the moon, and the rest, which have great glory and veneration, but no rest or intermission: being in a perpetual office of motion, for the cherishing, in turn and in course, of inferior bodies: expressing likewise the true manner of the motions of government, which, though they ought to be swift and rapid in respect of despatch and occasions, yet are they to be constant and regular, without wavering or confusion.

So did they represent unto them how the heavens do not enrich themselves by the earth and the seas, nor keep no dead stock, nor untouched treasures of that they draw to them from below; but whatsoever moisture they do levy and take from both elements in vapours, they do spend and turn back again in showers, only holding and storing them up for a time, to the end to issue and distribute them in season.

But chiefly, they did express and expound unto them that fundamental law of nature, whereby all things do subsist and are preserved: which is, that every thing in nature, although it hath its private and particular affection and appetite, and doth follow and pursue the same in small moments, and when it is free and delivered from more general and common respects; yet, nevertheless, when there is question or case for sustaining of the more general, they forsake their own particularities, and attend and conspire to uphold the public.

So we see the iron in small quantity will ascend and approach to the loadstone upon a particular sympathy: but if it be any quantity of moment, it leaveth its appetite of amity to the loadstone, and, like a good patriot, falleth to the earth, which is the place and region of massy bodies.

So again, the water and other like bodies do fall towards the centre of the earth, which is, as was said, their region or country; and yet we see nothing more usual in all water-works and engines, than that the water, rather than to suffer any distraction or disunion in nature, will ascend, forsaking the love to its own region or country, and applying itself to the body next adjoining.

But it were too long a digression to proceed to more examples of this kind. Your majesty yourself did fall upon a passage of this nature in your gracious speech of thanks unto your council, when, acknowledging princely their vigilances and well-deservings, it pleased you to note, that it was a success and event above the course of nature to have so great change with so great a quiet: forasmuch as sudden mutations, as well in state as in nature, are rarely without violence and perturbe-

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tion: so as still I conclude there is, as was said, a congruity between the principles of nature and policy. And lest that instance may seem to oppone to this assertion, I may, even in that particular, with your majesty's favour, offer unto you a type or pattern in nature, much resembling this event in your state; namely, earthquakes, which many of them bring ever much terror and wonder, but no actual hurt; the earth trembling for a moment, and suddenly stablishing in perfect quiet as it was before.

This knowledge, then, of making the government of the world a mirror for the government of a state, being a wisdom almost lost, whereof the reason I take to be because of the difficulty for one man to embrace both philosophies, I have thought good to make some proof, as far as my weakness and the straits of time will suffer, to revive in the handling of one particular, wherewith now I most humbly present your majesty: for surely, as hath been said, it is a form of discourse anciently used towards kings; and to what king should it be more proper than to a king that is studious to conjoin contemplative virtue and active virtue together?

Your majesty is the first king that had the honour to be "lapis angularis;" to unite these two mighty and warlike nations of England and Scotland under one sovereignty and monarchy. It doth not appear by the records and memoirs of any true history, or scarcely by the fiction and pleasure of any fabulous narration or tradition, that ever, of any antiquity, this island of Great Britain was united under one king before this day. And yet there be no mountains nor races of hills, there be no seas or great rivers, there is no diversity of tongue or language that hath invited or provoked this ancient separation or divorce. The lot of Spain was to have the several kingdoms of that continent, Portugal only excepted, to be united in an age not long past; and now in our age that of Portugal also, which was the last that held out, to be incorporate with the rest. The lot of France hath been, much about the same time, likewise, to have re-annexed unto that crown the several duchies and portions which were in former times dismembered. The lot of this island is the last reserved for your majesty's happy times, by the special providence and favour of God, who hath brought your majesty to this happy conjunction with the great consent of hearts, and in the strength of your years, and in the maturity of your experience. It resteth but that, as I promised, I set before your majesty's princely consideration, the grounds of nature touching the union and commixture of bodies, and the correspondence which they have with the grounds of policy in the conjunction of states and kingdoms.

First, therefore, that position, "Vis unita fortior," being one of the common notions of the mind, needeth not much to be induced or illustrated.

We see the sun when he entereth, and while he continueth under the sign of Leo, causeth more vehement heats than when he is in Cancer, what time his beams are nevertheless more perpendicular. The reason whereof, in great part, hath been truly ascribed to the conjunction and corradiation, in that place of heaven, of the sun with the four stars of the first magnitude, Sirius, Canicula, Cor Leonis, and Cauda Leonis.

So the moon likewise, by ancient tradition, while she is in the same sign of Leo, is said to be at the heart, which is not for any affinity which that place of heaven can have with that part of man's body, but only because the moon is then, by reason of the conjunction and nearness with the stars aforenamed, in greatest strength of influence, and so worketh upon that part in inferior bodies, which is most vital and principal.

So we see waters and liquors, in small quantity, do easily putrefy and corrupt; but in large quantity subsist long, by reason of the strength they receive by union.

So in earthquakes, the more general do little hurt, by reason of the united weight which they offer to subvert; but narrow and particular earthquakes have many times overturned whole towns and cities.

So then this point touching the force of union is evident: and therefore it is more fit to speak of the manner of union: wherein again it will not be pertinent to handle one kind of union, which is union by victory, when one body doth merely subdue another, and converteth the same into its own nature, extinguishing and expulsing what part soever of it it cannot overcome. As when the fire converteth the wood into fire, purging away the smoke and the ashes as unapt matter to inflame: or when the body of a living creature doth convert and assimilate food and nourishment, purging and expelling whatsoever it cannot convert. For these representations do answer in matter of policy to union of countries by conquest, where the conquering state doth extinguish, extirpate, and expulse any part of the state conquered, which it findeth so contrary as it cannot alter and convert it. And, therefore, leaving violent unions, we will consider only of natural unions.

The difference is excellent which the best observers in nature do take between "compositio" and "mistio," putting together, and mingling: the one being but a conjunction of bodies in place, the other in quality and consent: the one the mother of sedition and alteration, the other of peace and continuance: the one rather a confusion than a union, the other properly a union. Therefore we see those bodies, which they call "imperfecte mista," last not, but are speedily

dissolved. For take, for example, snow or froth, which are compositions of air and water, and in them you may behold how easily they sever and dissolve, the water closing together and excluding the air.

So those three bodies which the alchymists do so much celebrate as the three principles of things; that is to say, earth, water, and oil, which it pleaseth them to term salt, mercury, and sulphur, we see, if they be united only by composition or putting together, how weakly and rudely they do incorporate: for water and earth make but an imperfect slime; and if they be forced together by agitation, yet, upon a little settling, the earth resideth in the bottom. So water and oil, though by agitation it be brought into an ointment, yet after a little settling the oil will float on the top. So as such imperfect mixtures continue no longer than they are forced; and still in the end the worthiest getteth above.

But otherwise it is of perfect mixtures. For we see these three bodies, of earth, water, and oil, when they are joined in a vegetable or mineral, they are so united, as, without great subtlety of art and force of extraction, they cannot be separated and reduced into the same simple bodies again. So as the difference between "compositio" and "mistio" clearly set down is this; that "compositio" is the joining or putting together of bodies without a new form: and "mistio" is the joining or putting together of bodies under a new form: for the new form is "commune vinculum," and without that the old forms will be at strife and discord.

Now, to reflect this light of nature upon matter of estate; there hath been put in practice in government these two several kinds of policy in uniting and conjoining of states and kingdoms; the one to retain the ancient form still severed, and only conjoined in sovereignty; the other to superinduce a new form, agreeable and convenient to the entire estate. The former of these hath been more usual, and is more easy; but the latter is more happy. For if a man do attentively revolve histories of all nations, and judge truly thereupon, he will make this conclusion, that there was never any states that were good commixtures but the Romans; which, because it was the best state of the world, and is the best example of this point, we will chiefly insist thereupon.

In the antiquities of Rome, Virgil bringeth in Jupiter, by way of oracle or prediction, speaking of the mixture of the Trojans and the Italians:

> Sermonem Ausonii patrium moresque tenebunt:
> Utque est, nomen erit: commixti corpore tantum
> Subsident Teucri; morem ritusque sacrorum
> Adjiciam faciamque omnes uno ore Latinos.
> Hinc genus, Ausonio mixtum quod sanguine surget,
> Supra homines, supra ire Deos pietate videbis.
> Æn. xii. 834.

Wherein Jupiter maketh a kind of partition or distribution: that Italy should give the language and the laws; Troy should give a mixture of men, and some religious rites; and both people should meet in one name of Latins.

Soon after the foundation of the city of Rome, the people of the Romans and the Sabines mingled upon equal terms: wherein the interchange went so even, that, as Livy noteth, the one nation gave the name to the place, the other to the people. For Rome continued the name, but the people were called Quirites, which was the Sabine word, derived of Cures, the country of Tatius.

But that which is chiefly to be noted in the whole continuance of the Roman government; they were so liberal of their naturalizations, as in effect they made perpetual mixtures. For the manner was to grant the same, not only to particular persons, but to families and lineages; and not only so, but to whole cities and countries. So as in the end it came to that, that Rome was "communis patria," as some of the civilians call it.

So we read of St. Paul, after he had been beaten with rods, and thereupon charged the officer with the violation of the privilege of a citizen of Rome; the captain said to him, "Art thou then a Roman? That privilege hath cost me dear." To whom St. Paul replied, "But I was so born;" and yet, in another place, St. Paul professeth himself, that he was a Jew by tribe: so as it is manifest that some of his ancestors were naturalized; and so it was conveyed to him and their other descendants.

So we read that it was one of the first despites that was done to Julius Cæsar, that whereas he obtained naturalization for a city in Gaul, one of the city was beaten with rods of the consul Marcellus.

So we read in Tacitus, that in the Emperor Claudius's time, the nation of Gaul, that part which is called Comata, the wilder part, were suitors to be made capable of the honour of being senators and officers of Rome. His words are these: "Cum de supplendo senatu agitaretur primoresque Galliæ, quæ Comata appellata fœdera, et civitatem Romanam pridem assecuti, jus adipiscendorum in urbe honorum expeterent: multus ea super re variusque rumor, et studiis diversis, apud principem certabatur." And in the end, after long debate, it was ruled they should be admitted.

So, likewise, the authority of Nicholas Machiavel seemeth not to be contemned; who, inquiring the causes of the growth of the Roman empire, doth give judgment; there was not one greater than this, that the state did so easily compound and incorporate with strangers.

It is true, that most estates and kingdoms have taken the other course: of which this effect hath followed, that the addition of further empire and territory hath been rather matter of burden, than matter of strength unto them: yea, and, farther, it

hath kept alive the seeds and roots of revolts and rebellions for many ages; as we may see in a fresh and notable example of the kingdon of Arragon: which, though it were united to Castile by marriage, and not by conquest, and so descended in hereditary union by the space of more than a hundred years; yet, because it was continued in a divided government, and not well incorporated and cemented with the other crowns, entered into a rebellion upon point of their "fueros," or liberties, now of very late years.

Now, to speak briefly of the several parts of that form, whereby states and kingdoms are perfectly united, they are, besides the sovereignty itself, four in number; union in name, union in language, union in laws, union in employments.

For name, though it seem but a superficial and outward matter, yet it carrieth much impression and enchantment: the general and common name of Græcia made the Greeks always apt to unite, though otherwise full of divisions amongst themselves, against other nations whom they called barbarous. The Helvetian name is no small band to knit together their leagues and confederacies the faster. The common name of Spain, no doubt, hath been a special means of the better union and conglutination of the several kingdoms of Castile, Arragon, Granada, Navarre, Valentia, Catalonia, and the rest, comprehending also now lately Portugal.

For language, it is not needful to insist upon it; because both your majesty's kingdoms are of one language, though of several dialects; and the difference is so small between them, as promiseth rather an enriching of one language than a continuance of two.

For laws, which are the principal sinews of government, they be of three natures; "jura," which I will term freedoms or abilities, "leges," and "mores."

For abilities and freedoms, they were amongst the Romans of four kinds, or rather degrees. "Jus connubii, jus civitatis, jus suffragii," and "jus petitionis" or "honorum." "Jus connubii" is a thing in these times out of use: for marriage is open between all diversities of nations. "Jus civitatis" answereth to that we call denization or naturalization. "Jus suffragii" answereth to the voice in parliament. "Jus petitionis" answereth to place in council or office. And the Romans did many times sever these freedoms; granting "Jus connubii, sine civitate," and "civitatem, sine suffragio," and "suffragium, sine jure petitionis," which was commonly with them the last.

For those we called "leges," it is a matter of curiosity and inconveniency, to seek either to extirpate all particular customs, or to draw all subjects to one place or resort of judicature and session. It sufficeth there be a uniformity in the principal and fundamental laws, both ecclesiastical and civil: for in this point the rule holdeth which was pronounced by an ancient father, touching the diversity of rites in the church; for finding the vesture of the queen in the psalm, which did prefigure the church, was of divers colours; and finding again that Christ's coat was without a seam, he concluded well, "in veste varietas sit, scissura non sit."

For manners: a consent in them is to be sought industriously, but not to be enforced: for nothing amongst people breedeth so much pertinacy in holding their customs, as sudden and violent offer to remove them.

And as for employments, it is no more but an indifferent hand, and execution of that verse:

Tros, Tyriusque mihi nullo discrimine agetur.

There remaineth only to remember out of the grounds of nature the two conditions of perfect mixture; whereof the former is time: for the natural philosophers say well, that "compositio" is "opus hominis" and "mistio opus naturæ." For it is the duty of man to make a fit application of bodies together: but the perfect fermentation and incorporation of them must be left to time and nature; and unnatural hasting thereof doth disturb the work, and not despatch it.

So we see, after the graft is put into the stock and bound, it must be left to time and nature to make that "continuum," which at the first was but "contiguum." And it is not any continual pressing or thrusting together that will prevent nature's season, but rather hinder it. And so in liquors, those commixtures which are at the first troubled, grow after clear and settled by the benefit of rest and time.

The second condition is, that the greater draw the less. So we see when two lights do meet, the greater doth darken and dim the less. And when a smaller river runneth into a greater, it loseth both its name and stream. And hereof, to conclude, we see an excellent example in the kingdoms of Judah and Israel. The kingdom of Judah contained two tribes; the kingdom of Israel contained ten. King David reigned over Judah for certain years; and, after the death of Ishbosheth, the son of Saul, obtained likewise the kingdom of Israel. This union continued in him, and likewise in his son Solomon, by the space of seventy years, at least, between them both: but yet, because the seat of the kingdom was kept still in Judah, and so the less sought to draw the greater: upon the first occasion offered, the kingdoms brake again, and so continued ever after.

Thus having in all humbleness made oblation to your majesty of these simple fruits of my devotion and studies, I do wish, and do wish it not in the nature of an impossibility, to my apprehension, that this happy union of your majesty's two kingdoms of England and Scotland, may be in as good an hour and under the like divine providence, as that was between the Romans and the Sabines.

CERTAIN ARTICLES OR CONSIDERATIONS

TOUCHING THE

UNION OF THE KINGDOMS OF ENGLAND AND SCOTLAND.

COLLECTED AND DISPERSED FOR HIS MAJESTY'S BETTER SERVICE.

Your majesty, being, I doubt not, directed and conducted by a better oracle than that which was given for light to Æneas in his peregrination, "Antiquam exquirite matrem," hath a royal, and indeed an heroical desire to reduce these two kingdoms of England and Scotland into the unity of their ancient mother kingdom of Britain. Wherein, as I would gladly applaud unto your majesty, or sing aloud that hymn or anthem, "Sic itur ad astra;" so, in a more soft and submissive voice, I must necessarily remember unto your majesty that warning or caveat, "Ardua quæ pulchra:" it is an action that requireth, yea, and needeth much, not only of your majesty's wisdom, but of your felicity. In this argument I presumed at your majesty's first entrance to write a few lines, indeed scholastically and speculatively, and not actively or politicly, as I held it fit for me at that time; when neither your majesty was in that your desire declared, nor myself in that service used or trusted. But now that both your majesty hath opened your desire and purpose with much admiration, even of those who give it not so full an approbation, and that myself was by the Commons graced with the first vote of all the Commons selected for that cause; not in any estimation of my ability, for therein so wise an assembly could not be so much deceived, but in an acknowledgment of my extreme labours and integrity; in that business I thought myself every way bound, both in duty to your majesty, and in trust to that house of parliament, and in consent to the matter itself, and in conformity to mine own travels and beginnings, not to neglect any pains that may tend to the furtherance of so excellent a work; wherein I will endeavour that that which I shall set down be "nihil minus quam verba:" for length and ornament of speech are to be used for persuasion of multitudes, and not for information of kings, especially such a king as is the only instance that ever I knew to make a man of Plato's opinion, "that all knowledge is but remembrance, and that the mind of man knoweth all things, and demandeth only to have her own motions excited and awaked:" which your majesty's rare and indeed singular gift and faculty of swift apprehension, and infinite expansion or multiplication of another man's knowledge by your own, as I have often observed, so I did extremely admire in Goodwin's cause, being a matter full of secrets and mysteries of our laws, merely new unto you, and quite out of the path of your education, reading, and conference: wherein, nevertheless, upon a spark of light given, your majesty took in so dexterously and profoundly, as if you had been indeed "anima legis," not only in execution, but in understanding: the remembrance whereof, as it will never be out of my mind, so it will always be a warning to me to seek rather to excite your judgment briefly, than to inform it tediously; and if in a matter of that nature, how much more in this, wherein your princely cogitations have wrought themselves, and been conversant, and wherein the principal light proceeded from yourself.

And therefore my purpose is only to break this matter of the union into certain short articles and questions, and to make a certain kind of anatomy or analysis of the parts and members thereof: not that I am of opinion that all the questions which I now shall open, were fit to be in the consultation of the commissioners propounded. For I hold nothing so great an enemy to good resolution, as the making of too many questions; especially in assemblies which consist of many. For princes, for avoiding of distraction, must take many things by way of admittance; and if questions must be made of them, rather to suffer them to arise from others, than to grace them and authorize them as propounded from themselves. But unto your majesty's private consideration, to whom it may be better sort with me rather to speak as a remembrancer than as a counsellor, I have thought good to lay before you all the branches, lineaments, and degrees of this union, that upon the view and consideration of them and their circumstances, your majesty may the more clearly discern, and more readily call to mind which of them is to be embraced, and which to be rejected: and of these, which are to be accepted, which of them is presently to be proceeded in, and which to be put over to farther time. And again, which of them shall require authority of parliament, and which are fitter to be effected by your majesty's

royal power and prerogative, or by other policies or means; and, lastly, which of them is liker to pass with difficulty and contradiction, and which with more facility and smoothness.

First, therefore, to begin with that question, that, I suppose, will be out of question.

Whether it be not meet, that the statutes, which were made touching Scotland or the Scottish nation, while the kingdoms stood severed, be repealed?

It is true, there is a diversity in these; for some of these laws consider Scotland as an enemy's country; other laws consider it as a foreign country only: as, for example, the law of Rich. II. anno 7, which prohibiteth all armour or victual to be carried to Scotland; and the law of 7 of K. Henry VII. that enacteth all the Scottish men to depart the realm within a time prefixed. Both these laws, and some others, respect Scotland as a country of hostility: but the law of 22 of Edward IV. that endueth Berwick with the liberty of a staple, where all Scottish merchandises should resort that should be uttered for England, and likewise all English merchandises that should be uttered for Scotland; this law beholdeth Scotland only as a foreign nation; and not so much neither; for there have been erected staples in towns of England for some commodities, with an exclusion and restriction of other parts of England.

But this is a matter of the least difficulty; your majesty shall have a calendar made of the laws, and a brief of the effect; and so you may judge of them: and the like or reciproque is to be done by Scotland for such laws as they have concerning England and the English nation.

The second question is, what laws, customs, commissions, officers, garrisons, and the like, are to be put down, discontinued, or taken away upon the borders of both realms?

To this point, because I am not acquainted with the orders of the marches, I can say the less.

Herein falleth that question, whether that the tenants, who hold their tenants' rights in a greater freedom and exemption, in consideration of their service upon the borders, and that the countries themselves, which are in the same respect discharged of subsidies and taxes, should not now be brought to be in one degree with other tenants and countries; "nam cessante causa, tollitur effectus?" Wherein, in my opinion, some time would be given; "quia adhuc eorum messis in herba est:" but some present ordinance would be made to take effect at a future time, considering it is one of the greatest points and marks of the division of the kingdoms. And because reason doth dictate, that where the principal solution of continuity was, there the healing and consolidating plaster should be chiefly applied; there would be some farther device for the utter and perpetual confounding of those imaginary bounds, as your majesty termeth them: and therefore it would be considered, whether it were not convenient to plant and erect at Carlisle or Berwick some council or court of justice, the jurisdiction whereof might extend part into England and part into Scotland, with a commission not to proceed precisely, or merely according to the laws and customs either of England or Scotland, but mixedly, according to instructions by your majesty to be set down, after the imitation and precedent of the council of the marches here in England, erected upon the union of Wales?

The third question is that which many will make a great question of, though perhaps your majesty will make no question of it; and that is, whether your majesty should not make a stop or stand here, and not to proceed to any farther union, contenting yourself with the two former articles or points.

For it will be said, that we are now well, thanks be to God and your majesty, and the state of neither kingdom is to be repented of; and that it is true which Hippocrates saith, that "Sana corpora difficile medicationes ferunt," it is better to make alterations in sick bodies than in sound. The consideration of which point will rest upon these two branches: what inconveniences will ensue with time, if the realms stand as they are divided, which are yet not found nor sprung up. For it may be the sweetness of your majesty's first entrance, and the great benefit that both nations have felt thereby, hath covered many inconveniences: which, nevertheless, be your majesty's government never so gracious and politic, continuance of time and the accidents of time may breed and discover, if the kingdoms stand divided.

The second branch is; allow no manifest or important peril or inconvenience should ensue of the continuing of the kingdoms divided, yet, on the other side, whether that upon the farther uniting of them, there be not like to follow that addition and increase of wealth and reputation, as is worthy your majesty's virtues and fortune, to be the author and founder of, for the advancement and exaltation of your majesty's royal posterity in time to come?

But, admitting that your majesty should proceed to this more perfect and entire union, wherein your majesty may say, "Majus opus moveo;" to enter into the parts and degrees thereof, I think fit first to set down, as in a brief table, in what points the nations stand now at this present time already united, and in what points yet still severed and divided, that your majesty may the better see what is done, and what is to be done; and how that which is to be done is to be inferred upon that which is done.

The points wherein the nations stand already united are:

In sovereignty.

In the relative thereof, which is subjection.

In religion.

In continent.

In language.

And now lastly, by the peace by your majesty concluded with Spain, in leagues and confederacies: for now both nations have the same friends and the same enemies.

Yet, notwithstanding, there is none of the six points, wherein the union is perfect and consummate; but every of them hath some scruple or rather grain of separation inwrapped and included in them.

For the sovereignty, the union is absolute in your majesty and your generation; but if it should so be, which God of his infinite mercy defend, that your issue should fail, then the descent of both realms doth resort to the several lines of the several bloods royal.

For subjection, I take the law of England to be clear, what the law of Scotland is I know not, that all Scotchmen from the very instant of your majesty's reign begun are become denizens, and the "post nati" are naturalized subjects of England for the time forwards: for by our laws none can be an alien but he that is of another allegiance than our sovereign lord the king's: for there be but two sorts of aliens, whereof we find mention in our law, an alien ami, and an alien enemy; whereof the former is a subject of a state in amity with the king, and the latter a subject of a state in hostility: but whether he be one or other, it is an essential difference unto the definition of an alien, if he be not of the king's allegiance; as we see it evidently in the precedent of Ireland, who, since they were subjects to the crown of England, have ever been inheritable and capable as natural subjects: and yet not by any statute or act of parliament, but merely by the common law, and the reason the eof. So as there is no doubt, that every subject of Scotland was, and is in like plight and degree, since your majesty's coming in, as if your majesty had granted particularly your letters of denization or naturalization to every of them, and the "post nati" wholly natural. But then, on the other side, for the time backwards, and for those that were "ante nati," the blood is not by law naturalized, so as they cannot take it by descent from their ancestors without act of parliament: and therefore in this point there is a defect in the union of subjection.

For matter of religion, the union is perfect in points of doctrine; but in matter of discipline and government it is imperfect.

For the continent, it is true there are no natural boundaries of mountains or seas, or navigable rivers; but yet there are badges and memorials of borders; of which points I have spoken before.

For the language, it is true the nations are "unius labii," and have not the first curse of disunion, which was confusion of tongues, whereby one understood not another. But yet the dialect is differing and it remaineth a kind of mark of distinction. But for that, "tempori permittendum," it is to be left to time. For considering that both languages do concur in the principal office and duty of a language, which is to make a man's self understood; for the rest, it is rather to be accounted, as was said, a diversity of dialect than of language: and, as I said in my first writing, it is like to bring forth the enriching of one language, by compounding and taking in the proper and significant words of either tongue, rather than a continuance of two languages.

For leagues and confederacies, it is true, that neither nation is now in hostility with any state, wherewith the other nation is in amity: but yet so, as the leagues and treaties have been concluded with either nation respectively, and not with both jointly; which many contain some diversity of articles of straitness of amity with one more than with the other.

But many of these matters may perhaps be of that kind, as may fall within that rule, "In veste varietas sit, scissura non sit."

Now to descend to the particular points wherein the realms stand severed and divided, over and besides the former six points of separation, which I have noted and placed as defects or abatements of the six points of the union, and therefore shall not need to be repeated: the points, I say, yet remaining, I will divide into external and internal.

The external points therefore of the separation are four.

1. The several crowns, I mean the ceremonial and material crowns.

2. The second is the several names, styles, or appellations.

3. The third is the several prints of the seals.

4. The fourth is the several stamps or marks of the coins or moneys.

It is true, that the external are in some respect and parts much mingled and interlaced with considerations internal; and that they may be as effectual to the true union, which must be the work of time, as the internal, because they are operative upon the conceits and opinions of the people; the uniting of whose hearts and affections is the life and true end of this work.

For the ceremonial crowns, the questions will be, whether there shall be framed one new imperial crown of Britain to be used for the times to come? Also, admitting that to be thought convenient, whether in the frame thereof there shall not be some reference to the crowns of Ireland and France?

Also, whether your majesty should repeat or iterate your own coronation and your queen's, or only ordain that such new crown shall be used by your posterity hereafter?

The difficulties will be in the conceit of some inequality, whereby the realm of Scotland may be thought to be made an accession unto the realm of England. But that resteth in some cir-

cumstances; for the compounding of the two crowns is equal; the calling of the new crown the crown of Britain is equal. Only the place of coronation, if it shall be at Westminster, which is the ancient, august, and sacred place for the kings of England, may seem to make an inequality. And again, if the crown of Scotland be discontinued, then that ceremony, which I hear is used in the parliament of Scotland in the absence of the kings, to have the crowns carried in solemnity, must likewise cease.

For the name, the main question is, whether the contracted name of Britain shall be by your majesty used, or the divided names of England and Scotland?

Admitting there shall be an alteration, then the case will require these inferior questions:

First, whether the name of Britain shall only be used in your majesty's style, where the entire style is recited; and in all other forms the divided names to remain both of the realms and of the people? or otherwise, that the very divided names of realms and people shall likewise be changed or turned into special or subdivided names of the general name; that is to say, for example, whether your majesty in your style shall denominate yourself king of Britain, France, and Ireland, &c., and yet, nevertheless, in any commission, writ or otherwise, where your majesty mentions England or Scotland, you shall retain the ancient names, as "secundum consuetudinem regni nostri Angliæ;" or whether those divided names shall be forever lost and taken away, and turned into the subdivision of South-Britain and North-Britain, and the people to be South-Britons and North-Britons? And so, in the example aforesaid, the tenor of the like clause to run "secundum consuetudinem Britanniæ australis."

Also, if the former of these shall be thought convenient, whether it were not better for your majesty to take that alteration of style upon you by proclamation, as Edward the Third did the style of France, than to have it enacted by parliament?

Also, in the alteration of the style, whether it were not better to transpose the kingdom of Ireland, and put it immediately after Britain, and so place the islands together: and the kingdom of France, being upon the continent, last; in regard that these islands of the western ocean seem by nature and providence an entire empire in themselves; and also, that there was never king of England so entirely possessed of Ireland, as your majesty is: so as your style to run, king of Britain, Ireland, and the islands adjacent, and of France, &c.

The difficulties in this have been already thoroughly beaten over; but they gather but to two heads.

The one, point of honour and love to the former names.

The other, doubt, lest the alteration of the name may induce and involve an alteration of the laws and policies of the kingdom; both which, if your majesty shall assume the style of proclamation, and not by parliament, are in themselves satisfied: for then the usual names must needs remain in writs and records, the forms whereof cannot be altered but by act of parliament, and so the point of honour satisfied. And again, your proclamation altereth no law, and so the scruple of a tacit or implied alteration of laws likewise satisfied. But then it may be considered, whether it were not a form of the greatest honour, if the parliament, though they did not enact it, yet should become suitors and petitioners to your majesty to assume it?

For the seals, that there should be but one great seal of Britain, and one chancellor, and that there should only be a seal in Scotland for processes and ordinary justice; and that all patents of grants of lands or otherwise, as well in Scotland as in England, should pass under the great seal here, kept about your person; it is an alteration internal, whereof I do now speak.

But the question in this place is, whether the great seals of England and Scotland should not be changed into one and the same form of image and superscription of Britain, which, nevertheless, is requisite should be with some one plain or manifest alteration, lest there be a buz, and suspect, that grants of things in England may be passed by the seal of Scotland, or "e converso?"

Also, whether this alteration of form may not be done without act of parliament, as the great seals have used to be heretofore changed as to their impressions?

For the moneys, as to the real and internal consideration thereof, the question will be, whether your majesty shall not continue two mints? which, the distance of territory considered, I suppose will be of necessity.

Secondly, how the standards, if it be not already done, as I hear some doubt made of it in popular rumour, may be reduced into an exact proportion for the time to come; and likewise the computation, tale, or valuation to be made exact for the moneys already beaten?

That done, the last question is, which is only proper to this place, whether the stamp or the image and superscription of Britain for the time forwards should not be made the selfsame in both places, without any difference at all? A matter also which may be done, as our law is, by your majesty's prerogative without act of parliament.

These points are points of demonstration, "ad faciendum populum," but so much the more they go to the root of your majesty's intention, which is to imprint and inculcate into the hearts and heads of the people, that they are one people and one nation.

In this kind also I have heard it pass abroad in speech of the erection of some new order of knight-

hood, with a reference to the union, and an oath appropriate thereunto, which is a point likewise deserves a consideration. So much for the external points.

The internal points of separation are as followeth.

1. Several parliaments.
2. Several councils of state.
3. Several officers of the crown.
4. Several nobilities.
5. Several laws.
6. Several courts of justice, trials, and processes.
7. Several receipts and finances.
8. Several admiralties and merchandisings.
9. Several freedoms and liberties.
10. Several taxes and imposts.

As touching the several states ecclesiastical, and the several mints and standards, and the several articles and treaties of intercourse with foreign nations, I touched them before.

In these points of the strait and more inward union, there will intervene one principal difficulty and impediment, growing from that root, which Aristotle in his Politics maketh to be the root of all division and dissension in commonwealths, and that is equality and inequality. For the realm of Scotland is now an ancient and noble realm, substantive of itself.

But when this island shall be made Britain, then Scotland is no more to be considered as Scotland, but as a part of Britain; no more than England is to be considered as England, but as a part likewise of Britain; and consequently neither of these are to be considered as things entire of themselves, but in the proportion that they bear to the whole. And therefore let us imagine, "Nam id mente possumus, quod actu non possumus," that Britain had never been divided, but had ever been one kingdom; then that part of soil or territory, which is comprehended under the name of Scotland, is in quantity, as I have heard it esteemed, how truly I know not, not past a third part of Britain; and that part of soil or territory which is comprehended under the name of England, is two parts of Britain, leaving to speak of any difference of wealth or population, and speaking only of quantity. So, then, if, for example, Scotland should bring to parliament as much nobility as England, then a third part should countervail two parts; "nam si inæqualibus æqualia addas, omnia erunt inæqualia." And this, I protest before God and your majesty, I do speak not as a man born in England, but as a man born in Britain. And therefore to descend to particulars:

For the parliaments, the consideration of that point will fall into four questions.

1. The first, what proportion shall be kept between the votes of England and the votes of Scotland?

2. The second, touching the manner of proposition, or possessing of the parliament of causes there to be handled; which in England is used to be done immediately by any member of the parliament, or by the prolocutor; and in Scotland is used to be done immediately by the lords of the articles; whereof the one form seemeth to have more liberty, and the other more gravity and maturity: and therefore the question will be whether of these shall yield to other, or whether there should not be a mixture of both, by some commissions precedent to every parliament in the nature of lords of the articles, and yet not excluding the liberty of propounding in full parliament afterwards?

3. The third, touching the orders of parliament, how they may be compounded, and the best of either taken?

4. The fourth, how those, which by inheritance or otherwise have offices of honour and ceremony in both the parliaments, as the lord steward with us, &c., may be satisfied, and duplicity accommodated?

For the councils of estate, while the kingdoms stand divided, it should seem necessary to continue several councils; but if your majesty should proceed to a strict union, then, howsoever your majesty may establish some provincial councils in Scotland, as there is here of York, and in the marches of Wales, yet the question will be, whether it will not be more convenient for your majesty to have but one privy council about your person, whereof the principal officers of the crown of Scotland to be for dignity sake, howsoever their abiding and remaining may be as your majesty shall employ their service? But this point belongeth merely and wholly to your majesty's royal will and pleasure.

For the officers of the crown, the consideration thereof will fall into these questions.

First, in regard of the latitude of your kingdom and the distance of place, whether it will not be matter of necessity to continue the several officers, because of the impossibility for the service to be performed by one?

The second, admitting the duplicity of officers should be continued, yet whether there should not be a difference, that one should be the principal officer, and the other to be but special and subaltern? As, for example, one to be chancellor of Britain, and the other to be chancellor with some special addition, as here of the duchy, &c.

The third, if no such specialty or inferiority be thought fit, then whether both officers should not have the title and the name of the whole island and precincts? as the Lord Chancellor of England to be Lord Chancellor of Britain, and the Lord Chancellor of Scotland to be Lord Chancellor of Britain, but with several provisoes that they shall not intromit themselves but within their several precincts.

For the nobilities, the consideration thereof will fall into these questions:

The first, of their votes in parliament, which was touched before, what proportion they shall bear to the nobility of England? wherein, if the proportion which shall be thought fit be not full, yet your majesty may, out of your prerogative, supply it; for although you cannot make fewer of Scotland, yet you may make more of England.

The second is touching the place and precedence wherein to marshal them according to the precedence of England in your majesty's style, and according to the nobility of Ireland; that is, all English earls first, and then Scottish, will be thought unequal for Scotland. To marshal them according to antiquity, will be thought unequal for England. Because I hear their nobility is generally more ancient: and therefore the question will be, whether the indifferentest way were not to take them interchangeably; as for example, first, the ancient earl of England, and then the ancient earl of Scotland, and so "alternis vicibus?"

For the laws, to make an entire and perfect union, it is a matter of great difficulty and length, both in the collecting of them, and in the passing of them.

For, first, as to the collecting of them, there must be made by the lawyers of either nation a digest under titles of their several laws and customs, as well common laws as statutes, that they may be collated and compared, and that the diversities may appear and be discerned of. And for the passing of them, we see by experience that "patrius mos" is dear to all men, and that men are bred and nourished up in the love of it; and therefore how harsh changes and innovations are. And we see likewise what disputation and argument the alteration of some one law doth cause and bring forth, how much more the alteration of the whole corps of the law? Therefore the first question will be, whether it be not good to proceed by parts, and to take that that is most necessary, and leave the rest to time? The parts therefore or subject of laws, are for this purpose fitliest distributed according to that ordinary division of criminal and civil, and those of criminal causes into capital and penal.

The second question therefore is, allowing the general union of laws to be too great a work to embrace; whether it were not convenient that cases capital were the same in both nations; I say the cases, I do not speak of the proceedings or trials; that is to say, whether the same offences were not fit to be made treason or felony in both places?

The third question is, whether cases penal, though not capital, yet if they concern the public state, or otherwise the discipline of manners, were not fit likewise to be brought into one degree, as the case of misprision of treason, the case of "præmunire," the case of fugitives, the case of incest, the case of simony, and the rest?

But the question that is more urgent than any of these is, whether these cases at the least, be they of a higher or inferior degree, wherein the fact committed, or act done in Scotland, may prejudice the state and subjects of England, or "e converso," are not to be reduced into one uniformity of law and punishment? As, for example, a perjury committed in a court of justice in Scotland, cannot be prejudicial in England, because depositions taken in Scotland cannot be produced and used here in England. But a forgery of a deed in Scotland, I mean with a false date of England, may be used and given in evidence in England. So likewise the depopulating of a town in Scotland doth not directly prejudice the state of England: but if an English merchant shall carry silver and gold into Scotland, as he may, and thence transport it into foreign parts, this prejudiceth the state of England, and may be an evasion to all the laws of England ordained in that case; and therefore had need to be bridled with as severe a law in Scotland as it is here in England.

Of this kind there are many laws.

The law of the 5th of Richard II. of going over without license, if there be not the like law in Scotland, will be frustrated and evaded: for any subject of England may go first into Scotland, and thence into foreign parts.

So the laws prohibiting transportation of sundry commodities, as gold, and silver, ordnance, artillery, corn, &c., if there be not a correspondence of laws in Scotland, will in like manner be deluded and frustrate; for any English merchant or subject may carry such commodities first into Scotland, as well as he may carry them from port to port in England; and out of Scotland into foreign parts, without any peril of law.

So libels may be devised and written in Scotland, and published and scattered in England.

Treasons may be plotted in Scotland and executed in England.

And so in many other cases, if there be not the like severity of law in Scotland to restrain offences that there is in England, whereof we are here ignorant whether there be or no, it will be a gap or stop even for English subjects to escape and avoid the laws of England.

But for treasons, the best is that by the statute of 26 K. Henry VIII. cap. 13, any treason committed in Scotland may be proceeded with in England, as well as treasons committed in France, Rome, or elsewhere.

For courts of justice, trials, processes, and other administration of laws, to make any alteration in either nation, it will be a thing so new and unwonted to either people, that it may be doubted it will make the adminstration of justice, which of all other things ought to be known and certain as a beaten way, to become intricate and uncertain. And besides, I do not see that the severalty of administration of justice, though it be by court

sovereign of last resort, I mean without appeal or error, is any impediment at all to the union of a kingdom: as we see by experience in the several courts of parliament in the kingdom of France. And I have been always of opinion, that the subjects of England do already fetch justice somewhat far off, more than in any nation that I know, the largeness of the kingdom considered, though it be holpen in some part by the circuits of the judges; and the two councils at York, and in the marches of Wales established.

But it may be a good question, whether, as "commune vinculum" of the justice of both nations, your majesty should not erect some court about your person, in the nature of the grand council of France: to which court you might, by way of evocation, draw causes from the ordinary judges of both nations; for so doth the French king from all the courts of parliament in France; many of which are more remote from Paris than any part of Scotland is from London.

For receipts and finances, I see no question will arise, in regard it will be matter of necessity to establish in Scotland a receipt of treasure for payments and erogations to be made in those parts: and for the treasure of spare, in either receipts, the custodies thereof may well be several; considering by your majesty's commandment they may be at all times removed or disposed according to your majesty's occasions.

For the patrimonies of both crowns, I see no questions will arise, except your majesty would be pleased to make one compound annexation, for an inseparable patrimony to the crown out of the lands of both nations: and so the like for the principality of Britain, and for other appennages of the rest of your children: erecting likewise such duchies and honours, compounded of the possession of both nations, as shall be thought fit.

For admiralty or navy, I see no great question will arise; for I see no inconvenience for your majesty to continue shipping in Scotland. And for the jurisdiction of the admiralties, and the profits and casualties of them, they will be respective unto the coasts, over-against which the seas lie and are situated; as it is here with the admiralties of England.

And for merchandising, it may be a question, whether that the companies, of the merchant adventurers, of the Turkey merchants, and the Muscovy merchants, if they shall be continued, should not be compounded of merchants of both nations, English and Scottish. For to leave trade free in the one nation, and to have it restrained in the other, may percase breed some inconvenience.

For freedoms and liberties, the chartèrs of both nations may be reviewed; and of such liberties as are agreeable and convenient for the subjects and people of both nations, one great charter may be made and confirmed to the subjects of Britain; and those liberties which are peculiar or proper to either nation, to stand in state as they do.

But for imposts and customs, it will be a great question how to accommodate them and reconcile them: for if they be much easier in Scotland than they be here in England, which is a thing I know not, then this inconvenience will follow; that the merchants of England may unlade in the ports of Scotland: and this kingdom to be served from thence, and your majesty's customs abated.

And for the question, whether the Scottish merchants should pay strangers' custom in England? that resteth upon the point of naturalization, which I touched before.

Thus have I made your majesty a brief and naked memorial of the articles and points of this great cause, which may serve only to excite and stir up your majesty's royal judgment, and the judgment of wiser men whom you will be pleased to call to it; wherein I will not presume to persuade or dissuade any thing; nor to interpose mine own opinion, but do expect light from your majesty's royal directions; unto the which I shall ever submit my judgment, and apply my travails. And I most humbly pray your majesty, in this which is done to pardon my errors, and to cover them with my good intention and meaning, and desire I have to do your majesty service, and to acquit the trust that was reposed in me, and chiefly in your majesty's benign and gracious acceptation.

THE MOST HUMBLE

CERTIFICATE OR RETURN

OF

THE COMMISSIONERS OF ENGLAND AND SCOTLAND,

AUTHORIZED TO TREAT OF A UNION FOR THE WEAL OF BOTH REALMS:

2 JAC. I.

[PREPARED, BUT ALTERED.]

We the commissioners for England and Scotland respectively named and appointed, in all humbleness do signify to his most excellent majesty, and to the most honourable high courts of parliament of both realms, that we have assembled ourselves, consulted and treated according to the nature and limits of our commission; and forasmuch as we do find that hardly within the memory of all times, or within the compass of the universal world, there can be showed forth a fit example or precedent of the work we have in hand concurring in all points material, we thought ourselves so much the more bound to resort to the infallible and original grounds of nature and common reason, and, freeing ourselves from the leading or misleading of examples, to insist and fix our considerations upon the individual business in hand, without wandering or discourses.

It seemed therefore unto us a matter demonstrative by the light of reason, that we were in first place to begin with the remotion and abolition of all manner of hostile, envious, or malign laws on either side, being in themselves mere temporary, and now by time become directly contrary to our present most happy estate; which laws, as they are already dead in force and vigour, so we thought fit now to wish them buried in oblivion; that by the utter extinguishment of the memory of discords past, we may avoid all seeds of relapse into discords to come.

Secondly, as matter of nature not unlike the former, we entered into consideration of such limitary constitutions as served but for to obtain a form of justice between subjects under several monarchs, and did in the very grounds and motives of them presuppose incursions, and intermixture of hostility: all which occasions, as they are in themselves now vanished and done away, so we wish the abolition and cessation thereof to be declared.

Thirdly, for so much as the principal degree to union is communion and participation of mutual commodities and benefits, it appeared to us to follow next in order, that the commerce between both nations be set open and free, so as the commodities and provisions of either may pass and flow to and fro, without any stops or obstructions, into the veins of the whole body, for the better sustentation and comfort of all the parts: with caution nevertheless, that the vital nourishment be not so drawn into one part, as it may endanger a consumption and withering of the other.

Fourthly, after the communion and participation by commerce, which can extend but to the transmission of such commodities as are moveable, personal, and transitory, there succeeded naturally that other degree, that there be made a mutual endowment and donation of either realm towards other of the abilities and capacities to take and enjoy things which are permanent, real, and fixed; as, namely, freehold and inheritance, and the like: and that as well the internal and vital veins of blood be opened from interruption and obstruction in making pedigree, and claiming by descent, as the external and elemental veins of passage and commerce; with reservation nevertheless unto the due time of such abilities and capacities only, as no power on earth can confer without time and education.

And, lastly, because the perfection of this blessed work consisteth in the union, not only of the solid parts of the estate, but also in the spirit and sinews of the same, which are the laws and government, which nevertheless are already perfectly united in the head, but require a further time to be united in the bulk and frame of the whole body; in contemplation hereof we did conceive that the first step thereunto was to provide, that the justice of either realm should aid and assist, and not frustrate and interrupt the justice of the other, specially in sundry cases criminal; so that either realm may not be abused by malefactors as a sanctuary or place of refuge to avoid the condign punishment of their crimes and offences.

All which several points, as we account them,

summed up and put together, but as a degree or middle term to the perfection of this blessed work; so yet we conceive them to make a just and fit period for our present consultation and proceeding.

And for so much as concerneth the manner of our proceedings, we may truly make this attestation unto ourselves, that as the mark we shot at was union and unity, so it pleased God in the handling thereof to bless us with the spirit of unity, insomuch as from our first sitting unto the breaking up of our assembly, a thing most rare, the circumstance of the cause and persons considered, there did not happen or intervene, neither in our debates or arguments, any manner of altercation or strife of words; nor in our resolutions any variety or division of votes, but the whole passed with a unanimity and uniformity of consent: and yet so, as we suppose, there was never in any consultation greater plainness and liberty of speech, argument, and debate, replying, contradicting, recalling any thing spoken where cause was, expounding any matter ambiguous or mistaken; and all other points of free and friendly interlocution and conference, without cavillations, advantages, or overtakings: a matter that we cannot ascribe to the skill or temper of our own carriage, but to the guiding and conducting of God's holy providence and will, the true author of all unity and agreement. Neither did we, where the business required, rest so upon our own sense and opinions, but we did also aid and assist ourselves, as well with the reverend opinion of judges and persons of great science and authority in the laws, and also with the wisdom and experience of merchants, and men expert in commerce. In all which our proceedings, notwithstanding, we are so far from pretending or aiming at any prejudication, either of his royal majesty's sovereign and high wisdom, which we do most dutifully acknowledge to be able to pierce and penetrate far beyond the reach of our capacities, or of the solid and profound judgment of the high courts of parliament of both realms, as we do in all humbleness submit our judgments and doings to his sacred majesty, and to the parliaments, protesting our sincerity, and craving gracious and benign construction and acceptation of our travails.

We therefore with one mind and consent have agreed and concluded, that there be propounded and presented to his majesty and the parliament of both realms, these articles and propositions following.

A SPEECH

USED BY

SIR FRANCIS BACON, KNIGHT,

IN THE HONOURABLE HOUSE OF COMMONS, QUINTO JACOBI.

CONCERNING

THE ARTICLE OF THE GENERAL NATURALIZATION OF THE SCOTTISH NATION.

It may please you, Mr. Speaker, preface I will use none, but put myself upon your good opinion, to which I have been accustomed beyond my deservings; neither will I hold you in suspense what way I will choose, but now at the first I declare myself, that I mean to counsel the house to naturalize this nation: wherein, nevertheless, I have a request to make unto you, which is of more efficacy to the purpose I have in hand than all that I shall say afterwards. And it is the same request which Demosthenes did more than once, in great causes of estate, make to the people of Athens, "ut cum calculis suffragiorum sumant insignanimitatem reipublicæ," that when they took into their hands the balls, whereby to give their voices, according as the manner of them was, they would raise their thoughts, and lay aside those considerations, which their private vocations and degrees might minister and represent unto them, and would take upon them cogitations and minds agreeable to the dignity and honour of the estate.

For, Mr. Speaker, as it was aptly and sharply said by Alexander to Parmenio, when, upon their recital of the great offers which Darius made, Parmenio said unto him, "I would accept these offers, were I as Alexander:" he turned it upon him again, "So would I," saith he, "were I as Parmenio." So in this cause, if an honest English merchant, I do not single out that state in disgrace, for this island ever held it honourable, but only for an instance of a private profession, if an English merchant should say, "Surely I would proceed no farther in the union, were I as the

king;" it might be reasonably answered, "No more would the king, were he as an English merchant." And the like may be said of a gentleman of the country, be he never so worthy or sufficient; or of a lawyer, be he never so wise or learned; or of any other particular condition of men in this kingdom: for certainly, Mr. Speaker, if a man shall be only or chiefly sensible of those respects which his particular vocation and degree shall suggest and infuse into him, and not enter into true and worthy considerations of estate, he shall never be able aright to give counsel, or take counsel in this matter. So that if this request be granted, I account the cause obtained.

But to proceed to the matter itself: all consultations do rest upon questions comparative; for when a question is "de vero," it is simple, for there is but one truth; but when a question is "de bono," it is for the most part comparative; for there be differing degrees of good and evil, and the best of the good is to be preferred and chosen, and the worst of the evil is to be declined and avoided; and therefore in a question of this nature you may not look for answer proper to every inconvenience alleged; for somewhat that cannot be especially answered may, nevertheless, be encountered and overweighed by matter of greater moment, and therefore the matter which I shall set forth unto you will naturally receive the distribution of three parts.

First, an answer to those inconveniences which have been alleged to ensue, if we should give way to this naturalization; which, I suppose, you will not find to be so great as they have been made; but that much dross is put into the balance to help to make weight.

Secondly, an encounter against the remainder of these inconveniences which cannot properly be answered, by much greater inconveniences, which we shall incur if we do not proceed to this naturalization.

Thirdly, an encounter likewise, but of another nature, that is, by the gain and benefit which we shall draw and purchase to ourselves by proceeding to this naturalization. And yet, to avoid confusion, which evermore followeth upon too much generality, it is necessary for me, before I proceed to persuasion, to use some distribution of the points or parts of naturalization, which certainly can be no better, or none other, than the ancient distinction of "jus civitatis, jus suffragii vel tribus," and "jus petitionis sive honorum:" for all ability and capacity is either of private interest of "meum et tuum," or of public service; and the public consisteth chiefly either in voice, or in action, or office. Now it is the first of these, Mr. Speaker, that I will only handle at this time and in this place, and refer the other two for a committee, because they receive more distinction and restriction.

To come therefore to the inconveniences alleged on the other part, the first of them is, that there may ensue of this naturalization a surcharge of people upon this realm of England, which is supposed already to have the full charge and content: and therefore there cannot be an admission of the adoptive without a diminution of the fortunes and conditions of those that are native subjects of this realm. A grave objection, Mr. Speaker, and very dutiful; for it proceeds not of any unkindness to the Scottish nation, but of a natural fastness to ourselves: for that answer of the virgins, "Ne forte non sufficiat vobis et nobis," proceeded not out of any envy or malign humour, but out of providence, and the original charity which begins with ourselves. And I must confess, Mr. Speaker, that, as the gentleman said, that when Abraham and Lot, in regard of the greatness of their families, grew pent and straitened, it is true, that, brethren though they were, they grew to difference, and to those words, "Vade tu ad dexteram, et ego ad sinistram," &c. But certainly, I should never have brought that example on that side; for we see what followed of it, how that this separation "ad dexteram et ad sinistram," caused the miserable captivity of the one brother, and the dangerous, though prosperous war of the other, for his rescue and recovery.

But to this objection, Mr. Speaker, being so weighty and so principal, I mean to give three several answers, every one of them being, to my understanding, by itself sufficient.

The first is, that this opinion of the number of the Scottish nation, that should be likely to plant themselves here amongst us, will be found to be a thing rather in conceit than in event; for, Mr. Speaker, you shall find those plausible similitudes, of a tree that will thrive the better if it be removed into the more fruitful soil; and of sheep or cattle, that if they find a gap or passage open will leave the more barren pasture, and get into the more rich and plentiful, to be but arguments merely superficial, and to have no sound resemblance with the transplanting or transferring of families; for the tree, we know, by nature, as soon as it is set in the better ground, can fasten upon it, and take nutriment from it: and a sheep, as soon as he gets into the better pasture, what should let him to graze and feed? But there belongeth more, I take it, to a family or particular person, that shall remove from one nation to another: for if, Mr. Speaker, they have not stock, means, acquaintance, and custom, habitation, trades, countenance, and the like, I hope you doubt not but they will starve in the midst of the rich pasture, and are far enough off from grazing at their pleasure: and therefore, in this point, which is conjectural, experience is the best guide; for the time past is a pattern of the time to come. I think no man doubteth, Mr. Speaker, but his majesty's first coming in was as the

greatest spring-tide for the confluence and entrance of that nation. Now I would fain understand, in these four years' space, and in the fulness and strength of the current and tide, how many families of Scotchmen are planted in the cities, boroughs, and towns of this kingdom; for I do assure myself, that, more than some persons of quality about his majesty's person here at court, and in London, and some other inferior persons, that have a dependence upon them, the return and certificate, if such a survey should be made, would be of a number extremely small: I report me to all your private knowledges of the places where you inhabit.

Now, Mr. Speaker, as I said, "Si in ligno viridi ita fit, quid fiet in arido?" I am sure there will be no more such spring-tides. But you will tell me of a multitude of families of the Scottish nation in Polonia; and if they multiply in a country so far off, how much more here at hand? For that, Mr. Speaker, you must impute it of necessity to some special accident of time and place that draws them thither: for you see plainly before your eyes, that in Germany, which is much nearer, and in France, where they are invited with privileges, and with this very privilege of naturalization, yet no such number can be found: so as it cannot either be nearness of place, or privilege of person, that is the cause. But shall I tell you, Mr. Speaker, what I think? Of all the places in the world, near or far off, they will never take that course of life in this kingdom, which they content themselves with in Poland; for we see it to be the nature of all men, that they will rather discover poverty abroad, than at home. There is never a gentleman that hath overreached himself in expense, and thereby must abate his countenance, but he will rather travel, and do it abroad than at home: and we know well they have good high stomachs, and have ever stood in some terms of emulation with us: and therefore they will never live here, except they can live in good fashion. So as I assure you, Mr. Speaker, I am of opinion that the strife which we now have to admit them, will have like sequel as that contention had between the nobility and people of Rome for the admitting of a plebeian consul; which whilst it was in passage was very vehement, and mightly stood upon, and when the people had obtained it, they never made any plebeian consul, not in sixty years after: and so will this be for many years, as I am persuaded, rather a matter in opinion and reputation, than in use or effect. And this is the first answer that I give to this main inconvenience pretended, of surcharge of people.

The second answer which I give to this objection, is this: I must have leave to doubt, Mr. Speaker, that this realm of England is not yet peopled to the full; for certain it is, that the territories of France, Italy, Flanders, and some part of Germany, do in equal space of ground bear and contain a far greater quantity of people, if they were mustered by the poll; neither can I see, that this kingdom is so much inferior unto those foreign parts in fruitfulness, as it is in population; which makes me conceive we have not our full charge. Besides, I do see manifestly amongst us the badges and tokens rather of scarceness, than of press of people, as drowned grounds, commons, wastes, and the like, which is a plain demonstration, that howsoever there may be an over-swelling throng and press of people here about London, which is most in our eye, yet the body of the kingdom is but thin sown with people; and whosoever shall compare the ruins and decays of ancient towns in this realm, with the erections and augmentations of new, cannot but judge that this realm hath been far better peopled in former times; it may be, in the heptarchy, or otherwise: for generally the rule holdeth, the smaller the state the greater the population "pro rata." And whether this be true or no, we need not seek farther, than to call to our remembrance how many of us serve here in this place for desolate and decayed boroughs.

Again, Mr. Speaker, whosoever looketh into the principles of estate, must hold that it is the mediterrane countries, and not the maritime, which need to fear surcharge of people; for all sea provinces, and especially islands, have another element besides the earth and soil, for their sustentation. For what an infinite number of people are and may be sustained by fishing, carriage by sea, and merchandising? Wherein again I do discover, that we are not at all pinched by the multitude of people; for if we were, it were not possible that we should relinquish and resign such an infinite benefit of fishing to the Flemings, as it is well known we do. And therefore I see, that we have wastes by sea, as well as by land; which still is an infallible argument that our industry is not awakened to seek maintenance by any over-great press or charge of people. And, lastly, Mr. Speaker, there was never any kingdom in the ages of the world had, I think, so fair and happy means to issue and discharge the multitude of their people, if it were too great, as this kingdom hath, in regard of that desolate and wasted kingdom of Ireland; which being a country blessed with almost all the dowries of nature, as rivers, havens, woods, quarries, good soil, and temperate climate, and now at last under his majesty blessed also with obedience, doth, as it were, continually call unto us for our colonies and plantations. And so I conclude my second answer to this pretended inconvenience, of surcharge of people.

The third answer, Mr. Speaker, which I give, is this: I demand what is the worst effect that can follow of surcharge of people? Look into all stories, and you shall find it none other than some honourable war for the enlargement of their borders, which find themselves pent, upon foreign parts;

which inconvenience, in a valorous and warlike nation, I know not whether I should term an inconvenience or no; for the saying is most true, though in another sense, "Omne solum forti patria." It was spoken indeed of the patience of an exiled man, but it is no less true of the valour of a warlike nation. And certainly, Mr. Speaker, I hope I may speak it without offence, that if we did hold ourselves worthy, whensoever just cause should be given, either to recover our ancient rights, or to revenge our late wrongs, or to attain the honour of our ancestors, or to enlarge the patrimony of our posterity, we would never in this manner forget considerations of amplitude and greatness, and fall at variance about profit and reckonings; fitter a great deal for private persons than for parliaments and kingdoms. And thus, Mr. Speaker, I have this first objection to such satisfaction as you have heard.

The second objection is, that the fundamental laws of both these kingdoms of England and Scotland are yet diverse and several; nay, more, that it is declared by the instrument, that they shall so continue, and that there is no intent in his majesty to make innovation in them: and therefore that it should not be seasonable to proceed to this naturalization, whereby to endow them with our rights and privileges, except they should likewise receive and submit themselves to our laws; and this objection likewise, Mr. Speaker, I allow to be a weighty objection, and worthy to be well answered and discussed.

The answer which I shall offer is this: It is true, for my own part, Mr. Speaker, that I wish the Scottish nation governed by our laws; for I hold our laws with some reducement worthy to govern, and it were the world: but this is that which I say, and I desire therein your attention, that, according to true reason of estate, naturalization is in order first and precedent to union of laws; in degree a less matter than union of laws; and in nature separable, not inseparable from union of laws; for naturalization doth but take out the marks of a foreigner, but union of laws makes them entirely as ourselves. Naturalization taketh away separation; but union of laws doth take away distinction. Do we not see, Mr. Speaker, that in the administration of the world under the great monarch, God himself, that his laws are diverse; one law in spirits, another in bodies; one law in regions celestial, another in elementary; and yet the creatures are all one mass or lump, without any "vacuum" or separation? Do we not likewise see in the state of the church, that amongst people of all languages and lineages there is one communion of saints, and that we are all fellow-citizens and naturalized of the heavenly Jerusalem; and yet, nevertheless, divers and several ecclesiastical laws, policies, and hierarchies, according to the speech of that worthy father, "In veste varietas sit, scissura non sit?" And, therefore, certainly, Mr. Speaker, the bond of law is the more special and private bond, and the bond of naturalization the more common and general; for the laws are rather "figura reipublicæ" than "forma," and rather bonds of perfection than bonds of entireness: and therefore we see in the experience of our own government, that, in the kingdom of Ireland, all our statute laws, since Poyning's laws, are not in force; and yet we deny them not the benefit of naturalization. In Guernsey and Jersey and the Isle of Man, our common laws are not in force, and yet they have the benefit of naturalization; neither need any man doubt but that our laws and customs must in small time gather and win upon theirs; for here is the seat of the kingdom, whence come the supreme directions of estate: here is the king's person and example, of which the verse saith, "Regis ad exemplum totus componitur orbis." And therefore it is not possible, although not by solemn and formal act of estates, yet by the secret operation of no long time, but they will come under the yoke of our laws, and so "dulcis tractus pari jugo." And this is the answer I give to the second objection.

The third objection is, some inequality in the fortunes of these two nations, England and Scotland, by the commixture whereof there may ensue advantage to them and loss to us. Wherein, Mr. Speaker, it is well that this difference or disparity consisteth but in the external goods of fortune: for indeed it must be confessed, that for the goods of the mind and the body, they are "alteri nos," other ourselves; for, to do them but right, we know in their capacities and understandings they are a people ingenious, in labour industrious, in courage valiant, in body hard, active, and comely. More might be said, but in commending them we do but in effect commend ourselves: for they are of one piece and continent with us; and the truth is, we are participant both of their virtues and vices. For if they have been noted to be a people not so tractable in government, we cannot, without flattering ourselves, free ourselves altogether from that fault, being a thing indeed incident to all martial people; as we see it evident by the example of the Romans and others; even like unto fierce horses, that though they be of better service than others, yet are they harder to guide and manage.

But for this objection, Mr. Speaker, I purpose to answer it, not by the authority of Scriptures, which saith, "Beatius est dare quam accipere," but by an authority framed and derived from the judgment of ourselves and our ancestors in the same case as to this point. For, Mr. Speaker, in all the line of our kings none useth to carry greater commendation than his majesty's noble progenitor, King Edward, the first of that name; and amongst his other commendations, both of war and policy, none is more celebrated than his

purpose and enterprise for the conquest of Scotland, as not bending his designs to glorious acquests abroad, but to solid strength at home; which, nevertheless, if it had succeeded well, could not but have brought in all those inconveniences of the commixture of a more opulent kingdom with a less, that are now alleged. For it is not the yoke, either of our laws or arms, that can alter the nature of the climate or the nature of the soil; neither is it the manner of the commixture that can alter the matter of the commixture: and, therefore, Mr. Speaker, if it were good for us then, it is good for us now, and not to be prized the less because we paid not so dear for it. But a more full answer to this objection I refer over to that, which will come after, to be spoken touching surety and greatness.

The fourth objection, Mr. Speaker, is not properly an objection, but rather a pre-occupation of an objection of the other side; for it may be said, and very materially, Whereabout do we contend? The benefit of naturalization is by the law, in as many as have been or shall be born since his majesty's coming to the crown, already settled and invested. There is no more then but to bring the "ante-nati" into the degree of the "post-nati," that men grown that have well deserved, may be in no worse case than children which have not deserved, and elder brothers in no worse case than younger brothers; so as we stand upon "quiddam," not "quantum," being but a little difference of time of one generation from another. To this, Mr. Speaker, it is said by some, that the law is not so, but that the "post-nati" are aliens as well as the rest. A point that I mean not much to argue, both because it hath been well spoken to by the gentleman that spoke last before me; and because I do desire in this case and in this place to speak rather of conveniency than of law; only this I will say, that that opinion seems to me contrary to reason of law, contrary to form of pleading in law, and contrary to authority and experience of law. For reason of law, when I meditate of it, methinks the wisdom of the common laws of England, well observed, is admirable in the distribution of the benefit and protection of the laws, according to the several conditions of persons, in an excellent proportion. The degrees are four, but bipartite, two of aliens and two of subjects.

The first degree is of an alien born under a king or state, that is an enemy. If such a one come into this kingdom without safe-conduct, it is at his peril: the law giveth him no protection, neither for body, lands, nor goods; so as if he be slain there is no remedy by any appeal at the party's suit, although his wife were an English woman: marry at the king's suit, the case may be otherwise in regard of the offence to the peace.

The second degree is of an alien that is born under the faith and allegiance of a king or state that is a friend. Unto such a person the law doth impart a greater benefit and protection, that is, concerning things personal, transitory, and moveable, as goods and chattels, contracts, and the like, but not concerning freehold and inheritance. And the reason is, because he may be an enemy, though he be not; for the state under the obeisance of which he is, may enter into quarrel and hostility; and, therefore, as the law hath but a transitory assurance of him, so it rewards him but with transitory benefits.

The third degree is of a subject, who having been an alien, is made free by charter and denization. To such a one the law doth impart yet a more ample benefit; for it gives him power to purchase freehold and inheritance to his own use, and likewise enables the children born after his denization to inherit. But yet nevertheless he cannot make title or convey pedigree from any ancestor paramount; for the law thinks not good to make him in the same degree with a subject born, because he was once an alien, and so might once have been an enemy: and "nemo subito fingitur," men's affections cannot be so settled by any benefit, as when from their nativity they are inbred and inherent.

And the fourth degree, which is the perfect degree, is of such a person as neither is enemy, nor could have been enemy in time past, nor can be enemy in time to come; and therefore the law gives unto him the full benefit of naturalization.

Now, Mr. Speaker, if these be the true steps and paces of the law, no man can deny but whosoever is born under the king's obedience, never could "in aliquo puncto temporis" be an enemy; a rebel he might be, but no enemy, and therefore in reason of law is naturalized. Nay, contrariwise, he is bound "jure nativitatis" to defend this kingdom of England against all invaders or rebels; and, therefore, as he is obliged to the protection of arms, and that perpetually and universally, so he is to have the perpetual and universal benefit and protection of law, which is naturalization.

For form of pleading, it is true that hath been said, that if a man would plead another to be an alien, he must not only set forth negatively and privately, that he was born out of the obedience of our sovereign lord the king, but affirmatively, under the obedience of a foreign king or state in particular, which can never be done in this case.

As for authority, I will not press it; you know all what hath been published by the king's proclamation. And for experience of law we see it in the subjects of Ireland, in the subjects of Guernsey and Jersey, parcels of the duchy of Normandy; in the subjects of Calais, when it was English, which was parcel of the crown of France. But, as I said, I am not willing to enter into an argument of law, but to hold myself to point of conveniency, so as for my part I hold all "post-nati" naturalized "ipso jure;" but yet I am for

from opinion, that it should be a thing superfluous to have it done by parliament; chiefly in respect of that true principle of state, "Principum actiones præcipue ad famam sunt componendæ." It will lift up a sign to all the world of our love towards them, and good agreement with them. And these are, Mr. Speaker, the material objections which have been made on the other side, whereunto you have heard my answers; weigh them in your wisdoms, and so I conclude that general part.

Now, Mr. Speaker, according as I promised, I must fill the other balance in expressing unto you the inconveniences which we shall incur, if we shall not proceed to this naturalization: wherein that inconvenience, which above all others, and alone by itself, if there were none other, doth exceedingly move me, and may move you, is a position of estate, collected out of the records of time, which is this: that wheresoever several kingdoms or estates have been united in sovereignty, if that union hath not been fortified and bound in with a farther union, and, namely, that which is now in question, of naturalization, this hath followed, that at one time or other they have broken again, being upon all occasions apt to revolt and relapse to the former separation.

Of this assertion the first example which I will set before you, is of that memorable union which was between the Romans and the Latins, which continued from the battle at the lake of Regilla, for many years, unto the consulships of C. Plautius and L. Æmilius Mamercus.* At what time there began, about this very point of naturalization, that war which was called "Bellum sociale," being the most bloody and pernicious war that ever the Roman state endured: wherein, after numbers of battles and infinite sieges and surprises of towns, the Romans in the end prevailed and mastered the Latins; but, as soon as ever they had the honour of the war, looking back into what perdition and confusion they were near to have been brought, they presently naturalized them all. You speak of a naturalization in blood; there was a naturalization indeed in blood.

Let me set before you again the example of Sparta, and the rest of Peloponnesus, their associates. The state of Sparta was a nice and jealous state in this point of imparting naturalization to their confederates. But what was the issue of it? After they had held them in a kind of society and amity for divers years, upon the first occasion given, which was no more than the surprisal of the castle of Thebes, by certain desperate conspirators in the habit of maskers, there ensued immediately a general revolt and defection of their associates; which was the ruin of their state, never afterwards to be recovered.

Of later times let me lead your consideration to behold the like events in the kingdom of Arragon; which kingdom was united with Castile and the rest of Spain in the persons of Ferdinando and Isabella, and so continued many years; but yet so as it stood a kingdom severed and divided from the rest of the body of Spain in privileges, and directly in this point of naturalization, or capacity of inheritance. What came of this? Thus much, that now of fresh memory, not past twelve years since, only upon the voice of a condemned man out of the grate of a prison towards the street, that cried "Fueros, Libertad, Libertad," which is as much as liberties or privileges, there was raised a dangerous rebellion, which was suppressed with great difficulty with an army royal. After which victory nevertheless, to shun farther inconvenience, their privileges were disannulled, and they were incorporated with Castile and the rest of Spain. Upon so small a spark, notwithstanding so long continuance, were they ready to break and sever again.

The like may be said of the states of Florence and Pisa, which city of Pisa being united unto Florence, but not endowed with the benefit of naturalization, upon the first light of foreign assistance, by the expedition of Charles VIII. of France into Italy, did revolt, though it be since again re-united and incorporated.

The same effect we see in the most barbarous government, which shows it the rather to be an effect of nature; for it was thought a fit policy by the council of Constantinople, to retain the three provinces of Transylvania, Wallachia, and Moldavia, which were as the very nurses of Constantinople, in respect of their provisions, to the end they might be the less wasted, only under waywoods as vassals and homagers, and not under bashaws, as provinces of the Turkish empire: which policy we see by late experience proved unfortunate, as appeared by the revolt of the same three provinces, under the arms and conduct of Sigismond, Prince of Transylvania; a leader very famous for a time; which revolt is not yet fully recovered. Whereas we seldom or never hear of revolts of provinces incorporated to the Turkish empire.

On the other part, Mr. Speaker, because it is true what the logicians say, "Opposita juxta se posita magis elucescunt:" let us take a view, and we shall find that wheresoever kingdoms and states have been united, and that union corroborate, by the bond of mutual naturalization, you shall never observe them afterwards, upon any occasion of trouble or otherwise, to break and sever again: as we see most evidently before our eyes, in divers provinces of France, that is to say, Guienne, Provence, Normandy, Britainy, which, notwithstandi-

* 169 years after that battle. There are extant at this day coins or medals, in memory of a battle fought by this C. Plautius at Privernum. Another copy hath of T. Manlius and P. Decius.

ing the infinite infesting troubles of that kingdom, never offered to break again.

We see the like effect in all the kingdoms of Spain, which are mutually naturalized, as Leon, Castile, Valentia, Andalusia, Granada, Murcia, Toledo, Catalonia, and the rest, except Arragon, which held the contrary course, and therefore had the contrary success, as was said, and Portugal, of which there is not yet sufficient trial. And, lastly, we see the like effect in our own nation, which never rent asunder after it was once united; so as we now scarce know whether the heptarchy were a true story or a fable. And, therefore, Mr. Speaker, when I revolve with myself these examples and others, so lively expressing the necessity of a naturalization to avoid a relapse into a separation; and do hear so many arguments and scruples made on the other side; it makes me think on the old bishop, which, upon a public disputation of certain Christian divines with some learned men of the heathen, did extremely press to be heard; and they were loath to suffer him, because they knew he was unlearned, though otherwise a holy and well-meaning man: but at last, with much ado, he got to be heard; and when he came to speak, instead of using argument, he did only say over his belief; but did it with such assurance and constancy, as it did strike the minds of those that heard him more than any argument had done. And so, Mr. Speaker, against all these witty and subtle arguments, I say, that I do believe, and I would be sorry to be found a prophet in it, that except we proceed with this naturalization, though perhaps not in his majesty's time, who hath such interest in both nations, yet in the time of his descendants these realms will be in continual danger to divide and break again. Now if any man be of that careless mind, "Maneat nostros ea cura nepotes;" or of that hard mind, to leave things to be tried by the sharpest sword; sure I am, he is not of St. Paul's opinion, who affirmeth, that whosoever useth not foresight and provision for his family, is worse than an unbeliever; much more, if we shall not use foresight for these two kingdoms, that comprehend in them so many families, but leave things open to the peril of future divisions. And thus have I expressed unto you the inconvenience, which, of all others, sinketh deepest with me as the most weighty: neither do there want other inconveniences, Mr. Speaker, the effects and influence whereof, I fear, will not be adjourned to so long a day as this that I have spoken of: for I leave it to your wisdom to consider whether you do not think, in case, by the denial of this naturalization, any pique, alienation, or unkindness, I do not say should be, but should be thought to be, or noised to be between these two nations, whether it will not quicken and excite all the envious and malicious humours, wheresoever, which are now covered, against us, either foreign or at home; and so open the way to practices and other engines and machinations, to the disturbance of this state? As for that other inconvenience of his majesty's engagement to this action, it is too binding and too pressing to be spoken of, and may do better a great deal in your minds than in my mouth, or in the mouth of any man else; because, as I say, it doth press our liberty too far. And, therefore, Mr. Speaker, I come now to the third general part of my division, concerning the benefits which we shall purchase by this knitting of the knot surer and straiter between these two kingdoms, by the communicating of naturalization: the benefits may appear to be two, the one surety, the other greatness.

Touching surety, Mr. Speaker, it was well said by Titus Quintius the Roman, touching the state of Peloponnesus, that the tortoise is safe within her shell, "Testudo intra tegumen tuta est;" but if there be any parts that lie open, they endanger all the rest. We know well, that although the state at this time be in a happy peace, yet for the time past, the more ancient enemy to this kingdom hath been the French, and the more late the Spaniard; and both these had as it were their several postern gates, whereby they might have approach and entrance to annoy us. France had Scotland, and Spain had Ireland; for these were the two accesses which did comfort and encourage both these enemies to assail and trouble us. We see that of Scotland is cut off by the union of these two kingdoms, if that it shall be now made constant and permanent; that of Ireland is cut off likewise by the convenient situation of the west of Scotland towards the north of Ireland, where the sore was: which we see, being suddenly closed, hath continued closed by means of this salve; so that as now there are no parts of this state exposed to danger to be a temptation to the ambition of foreigners, but their approaches and avenues are taken away: for I do little doubt but those foreigners which had so little success when they had those advantages, will have much less comfort now that they be taken from them: and so much for surety.

For greatness, Mr. Speaker, I think a man may speak it soberly and without bravery, that this kingdom of England, having Scotland united, Ireland reduced, the sea provinces of the Low Countries contracted, and shipping maintained, is one of the greatest monarchies, in forces truly esteemed, that hath been in the world. For certainly the kingdoms here on earth have a resemblance with the kingdom of heaven, which our Saviour compareth, not to any great kernel or nut, but to a very small grain, yet such a one as is apt to grow and spread; and such do I take to be the constitution of this kingdom; if indeed we shall refer our counsels to greatness and power, and not quench them too much with the consideration of utility and wealth. For, Mr.

Speaker, was it not, think you, a true answer that Solon of Greece made to the rich King Crœsus of Lydia, when he showed unto him a great quantity of gold that he had gathered together, in ostentation of his greatness and might? But Solon said to him, contrary to his expectation, "Why, sir, if another come that hath better iron than you, he will be lord of all your gold." Neither is the authority of Machiavel to be despised, who scorneth that proverb of state, taken first from a speech of Mucianus, That moneys are the sinews of war; and saith, "There are no true sinews of war, but the very sinews of the arms of valiant men."

Nay more, Mr. Speaker, whosoever shall look into the seminaries and beginnings of the monarchies of the world, he shall find them founded in poverty.

Persia, a country barren and poor, in respect of Media, which they subdued.

Macedon, a kingdom ignoble and mercenary until the time of Philip the son of Amyntas.

Rome had poor and pastoral beginnings.

The Turks, a band of Sarmatian Scythes, that in a vagabond manner made incursion upon that part of Asia, which is yet called Turcomania; out of which, after much variety of fortune, sprung the Ottoman family, now the terror of the world.

So, we know, the Goths, Vandals, Alans, Huns, Lombards, Normans, and the rest of the northern people, in one age of the world made their descent or expedition upon the Roman empire, and came not, as rovers, to carry away prey, and be gone again; but planted themselves in a number of rich and fruitful provinces, where not only their generations, but their names, remain to this day; witness Lombardy, Catalonia, a name compounded of Goth and Alan, Andalusia, a name corrupted from Vandalitia, Hungaria, Normandy, and others.

Nay, the fortune of the Swisses of late years, which are bred in a barren and mountainous country, is not to be forgotten; who first ruined the Duke of Burgundy, the same who had almost ruined the kingdom of France, what time after the battle near Granson, the rich jewel of Burgundy, prized at many thousands, was sold for a few pence by a common Swiss, that knew no more what a jewel meant than did Æsop's cock. And, again, the same nation, in revenge of a scorn, was the ruin of the French king's affairs in Italy, Lewis XII. For that king, when he was pressed somewhat rudely by an agent of the Switzers to raise their pensions, brake into words of choler: "What," said he, "will these villains of the mountains put a tax upon me?" Which words lost him his duchy of Milan, and chased him out of Italy.

All which examples, Mr. Speaker, do well prove Solon's opinion of the authority and mastery that iron hath over gold. And, therefore, if I shall speak unto you mine own heart, methinks we should a little disdain that the nation of Spain, which howsoever of late it hath grown to rule, yet of ancient time served many ages; first under Carthage, then under Rome, after under Saracens, Goths, and others, should of late years take unto themselves that spirit as to dream of a monarchy in the west, according to that device, "Video solem orientem in occidente," only because they have ravished from some wild and unarmed people mines and store of gold; and on the other side, that this island of Britain, seated and manned as it is, and that hath, I make no question, the best iron in the world, that is, the best soldiers in the world, shall think of nothing but reckonings and audits, and "meum et tuum," and I cannot tell what.

Mr. Speaker, I have, I take it, gone through the parts which I propounded to myself, wherein if any man shall think that I have sung a "placebo," for mine own particular, I would have him know that I am not so unseen in the world, but that I discern it were much alike for my private fortune to rest a "tacebo," as to sing a "placebo" in this business: but I have spoken out of the fountain of my heart, "Credidi propter quod locutus sum:" I believed, therefore I spake. So as my duty is performed: the judgment is yours; God direct it for the best.

A SPEECH

USED BY

SIR FRANCIS BACON, KNIGHT,

IN THE LOWER HOUSE OF PARLIAMENT,

BY OCCASION OF A MOTION CONCERNING THE UNION OF LAWS.

And it please you, Mr. Speaker, were it now a time to wish, as it is to advise, no man should be more forward or more earnest than myself in this wish, that his majesty's subjects of England and Scotland were governed by one law: and that for many reasons.

First, Because it will be an infallible assurance that there will never be any relapse in succeeding ages to a separation.

Secondly, "Dulcis tractus pari jugo." If the draught lie most upon us, and the yoke lie lightest on them, it is not equal.

Thirdly, The qualities, and, as I may term it, the elements of their laws and ours are such, as do promise an excellent temperature in the compounded body: for if the prerogative here be too indefinite, it may be the liberty there is too unbounded; if our laws and proceedings be too prolix and formal, it may be theirs are too informal and summary.

Fourthly, I do discern to my understanding, there will be no great difficulty in this work; for their laws, by that I can learn, compared with ours, are like their language compared with ours: for as their language hath the same roots that ours hath, but hath a little more mixture of Latin and French; so their laws and customs have the like grounds that ours have, with a little more mixture of the civil law and French customs.

Lastly, The mean to this work seemeth to me no less excellent than the work itself: for if both laws shall be united, it is of necessity for preparation and inducement thereunto, that our own laws be reviewed and recompiled; than the which I think there cannot be a work, that his majesty can undertake in these his times of peace, more politic, more honourable, nor more beneficial to his subjects for all ages:

> Pace data terris, animum ad civilia vertit
> Jura suum, legesque tulit justissimus auctor.

For this continual heaping up of laws without digesting them, maketh but a chaos and confusion, and turneth the laws many times to become but snares for the people, as is said in the Scripture, "Pluet super eos laqueos." Now "Non sunt pejores laquei, quam laquei legum." And therefore this work I esteem to be indeed a work, rightly to term it, heroical. So that for this good wish of union of laws I do consent to the full; and I think you may perceive by that which I have said, that I come not in this to the opinion of others, but that I was long ago settled in it myself: nevertheless, as this is moved out of zeal, so I take it to be moved out of time, as commonly zealous motions are, while men are so fast carried on to the end, as they give no attention to the mean: for if it be time to talk of this now, it is either because the business now in hand cannot proceed without it, or because in time and order this matter should be precedent, or because we shall lose some advantage towards this effect so much desired, if we should go on in the course we are about. But none of these three in my judgment are true; and therefore the motion, as I said, unreasonable.

For, first, That there may not be a naturalization without a union in laws, cannot be maintained. Look into the example of the church and the union thereof. You shall see several churches, that join in one faith, one baptism, which are the points of spiritual naturalization, do many times in policy, constitutions, and customs differ; and therefore one of the fathers made an excellent observation upon the two mysteries; the one, that in the gospel, where the garment of Christ is said to have been without seam; the other, that in the psalm, where the garment of the queen is said to have been of divers colours; and concludeth, "In veste varietas sit, scissura non sit." So in this case, Mr. Speaker, we are now in hand to make this monarchy of one piece, and not of one colour. Look again into the examples of foreign countries, and take that next us of France, and there you shall find that they have this distribution, "pais du droit escrit," and "pais du droit coustumier." For Gascoigne, Languedoc, Provence, Dauphiny, are countries governed by the letter, or text of the civil law: but the Isle of France, Tourain, Berry, Anjou, and the rest, and most of all Britainy and Normandy are governed by customs, which amount to a municipal law, and use the civil law but only for grounds, and to

decide new and rare cases; and yet nevertheless naturalization passeth through all.

Secondly, That this union of laws should precede the naturalization, or that it should go on "pari passu," hand in hand, I suppose likewise, can hardly be maintained: but the contrary, that naturalization ought to precede, and that not in the precedence of an instant; but in distance of time: of which my opinion, as I could yield many reasons, so because all this is but a digression, and therefore ought to be short, I will hold myself now only to one, which is briefly and plainly this; that the union of laws will ask a great time to be perfected, both for the compiling and for the passing of them. During all which time, if this mark of strangers should be denied to be taken away, I fear it may induce such a habit of strangeness, as will rather be an impediment than a preparation to farther proceeding: for he was a wise man that said, "Opportuni magnis constibus transitus rerum," and in these cases, "non progredi, est regredi." And like as in a pair of tables, you must put out the former writing before you can put in new; and again, that which you write in, you write letter by letter; but that which you put out, you put out at once: so we have now to deal with the tables of men's hearts, wherein it is in vain to think you can enter the willing acceptance of our laws and customs, except you first put forth all notes either of hostility or foreign condition: and these are to be put out "simul et semel," at once without gradations; whereas the other points are to be imprinted and engraven distinctly and by degrees.

Thirdly, Whereas it is conceived by some, that the communication of our benefits and privileges is a good hold that we have over them to draw them to submit themselves to our laws, it is an argument of some probability, but yet to be answered many ways. For, first, the intent is mistaken, which is not, as I conceive it, to draw them wholly to a subjection to our laws, but to draw both nations to one uniformity of law. Again, to think that there should be a kind of articulate and indented contract, that they should receive our laws to obtain our privileges, it is a matter in reason of estate not to be expected, being that which scarcely a private man will acknowledge, if it come to that whereof Seneca speaketh, "Beneficium accipere est libertatem vendere." No, but courses of estate do describe and delineate another way, which is, to win them either by benefit or by custom: for we see in all creatures that men do feed them first, and reclaim them after. And so in the first institution of kingdoms, kings did first win people by many benefits and protections, before they pressed any yoke. And for custom, which the poet calls "imponere morem;" who doubts but that the seat of the kingdom, and the example of the king resting here with us, our manners will quickly be there, to make all things ready for our laws? And, lastly, the naturalization, which is now propounded, is qualified with such restrictions as there will be enough kept back to be used at all times for an adamant of drawing them farther on to our desires. And therefore to conclude, I hold this motion of union of laws very worthy, and arising from very good minds; but yet not proper for this time.

To come therefore to that, which is now in question, it is no more but whether there should be a difference made, in this privilege of naturalization, between the "ante-nati" and the "post-nati," not in point of law, for that will otherwise be decided, but only in point of convenience; as if a law were now to be made "de novo." In which question I will at this time only answer two objections, and use two arguments, and so leave it to your judgment.

The first objection hath been, that if a difference should be, it ought to be in favour of the "ante-nati," because they are persons of merit, service, and proof; whereas the "post-nati" are infants, that, as the Scripture saith, know not the right hand from the left.

This were good reason, Mr. Speaker, if the question were of naturalizing some particular persons by a private bill; but it hath no proportion with the general case; for now we are not to look to respects that are proper to some, but to those which are common to all. Now then, how can it be imagined, but that those which took their first breath, since this happy union, inherent in his majesty's person, must be more assured and affectionate to this kingdom, than those generally can be presumed to be, which were sometimes strangers? for "Nemo subito fingitur:" the conversions of minds are not so swift as the conversions of times. Nay, in effects of grace, which exceed far the effects of nature, we see St. Paul makes a difference between those he calls Neophytes, that is, newly grafted into Christianity, and those that are brought up in the faith. And so we see by the laws of the Church that the children of Christians shall be baptized in regard of the faith of their parents: but the child of an ethnic may not receive baptism till he be able to make an understanding profession of his faith.

Another objection hath been made, that we ought to be more provident and reserved to restrain the "post-nati" than the "ante-nati;" because during his majesty's time, being a prince of so approved wisdom and judgment, we need no better caution than the confidence we may repose in him; but in the future reigns of succeeding ages, our caution must be "in re" and not "in persona."

But, Mr. Speaker, to this I answer, that as we cannot expect a prince hereafter less like to err in respect of his judgment; so, again, we cannot expect a prince so like to exceed, if I may so term it, in this point of beneficence to that nation, in

respect of the occasion. For whereas all princes and all men are won either by merit or conversation, there is no appearance, that any of his majesty's descendants can have either of these causes of bounty towards that nation in so ample degree as his majesty hath. And these be the two objections, which seemed to me most material, why the "post-nati" should be left free, and not to be concluded in the same restrictions with the "ante-nati;" whereunto you have heard the answers.

The two reasons, which I will use on the other side, are briefly these: the one being a reason of common sense; the other, a reason of estate.

We see, Mr. Speaker, the time of the nativity is in most cases principally regarded. In nature, the time of planting and setting is chiefly observed; and we see the astrologers pretend to judge of the fortune of the party by the time of the nativity. In laws, we may not unfitly apply the case of legitimation to the case of naturalization; for it is true that the common canon law doth put the "ante-natus" and the "post-natus" in one degree. But, when it was moved to the parliament of England, "Barones una voce responderunt, Nolumus leges Angliæ mutare." And though it must be confessed that the "ante-nati" and "post-nati" are in the same degree in dignities; yet were they never so in abilities: for no man doubts, but the son of an earl or baron, before his creation or call, shall inherit the dignity, as well as the son born after. But the son of an attainted person, born before the attainder, shall not inherit, as the after-born shall, notwithstanding charter of pardon.

The reason of estate is, that any restriction of the "ante-nati" is temporary, and expireth with this generation; but if you make it in the "post-nati" also, you do but in substance pen a perpetuity of separation.

Mr. Speaker, in this point I have been short, because I little expected this doubt, as to point of convenience; and therefore will not much labour, where I suppose there is no greater opposition.

A PREPARATION

TOWARD

THE UNION OF THE LAWS

OF

ENGLAND AND SCOTLAND.

Your majesty's desire of proceeding towards the union of this whole island of Great Britain under one law, is, as far as I am capable to make any opinion of so great a cause, very agreeable to policy and justice. To policy, because it is one of the best assurances, as human events can be assured, that there will be never any relapse in any future ages to a separation. To justice, because "dulcis tractus pari jugo:" it is reasonable that communication of privilege draw on communication of discipline and rule. This work being of greatness and difficulty, needeth not to embrace any greater compass of designment, than is necessary to your majesty's main end and intention. I consider, therefore, that it is a true and received division of law into "jus publicum" and "privatum," the one being the sinews of property, and the other of government; for that which concerneth private interest of "meum" and "tuum, in my simple opinion, it is not at this time to be meddled with; men love to hold their own as they have held, and the difference of this law carrieth no mark of separation; for we see in any one kingdom, which is most at unity in itself, there is diversity of customs for the guiding of property and private rights: "in veste varietas sit, scissura non sit." All the labour is to be spent in the other part; though perhaps not in all the other part; for, it may be, your majesty, in your high wisdom, will discern that even in that part there will not be requisite a conformity in all points. And although such conformity were to be wished, yet, perchance it will be scarcely possible in many points to pass them for the present by assent of parliament. But because we, that serve your majesty in the service of our skill and profession, cannot judge what your majesty, upon reason of state, will leave and take; therefore it is fit for us to give, as near as we can, a general information: wherein, I, for my part, think good to hold myself to one of the parallels, I mean that of the English laws. For, although I have read, and read with delight, the Scottish statutes, and some other collection of

their laws; with delight, I say, partly to see their brevity and propriety of speech, and partly to see them come so near to our laws; yet, I am unwilling to put my sickle in another's harvest, but to leave it to the lawyers of the Scottish nation; the rather, because I imagine with myself that if a Scottish lawyer should undertake, by reading of the English statutes, or other our books of law, to set down positively in articles what the law of England were, he might oftentimes err: and the like errors, I make account, I might incur in theirs. And, therefore, as I take it, the right way is, that the lawyers of either nation do set down in brief articles what the law is of their nation, and then after, a book of two columns, either having the two laws placed respectively, to be offered to your majesty, that your majesty may by a ready view see the diversities, and so judge of the reduction, or leave it as it is.

"Jus publicum" I will divide, as I hold it fittest for the present purpose, into four parts. The first, concerning criminal causes, which with us are truly accounted "publici juris," because both the prejudice and the prosecution principally pertain to the crown and public estate. The second, concerning the causes of the church. The third, concerning magistrates, officers, and courts: wherein falleth the consideration of your majesty's regal prerogative, whereof the rest are but streams. And the fourth, concerning certain special and politic laws, usages, and constitutions, that do import the public peace, strength, and wealth of the kingdom. In which part I do comprehend not only constant ordinances of law, but likewise forms of administration of law, such as are the commissions of the peace, the visitations of the provinces by the judges of the circuits, and the like. For these, in my opinion, for the purpose now in hand, deserve a special observation, because they being matters of that temporary nature, as they may be altered, as I suppose, in either kingdom, without parliament, as to your majesty's wisdom may seem best; it may be the most profitable and ready part of this labour will consist in the introducing of some uniformity in them.

To begin therefore with capital crimes, and, first, that of treason.

CASES OF TREASON.

Where a man doth compass or imagine the death of the king, if it appear by any overt act, it is treason.

Where a man doth compass or imagine the death of the king's wife, if it appear by any overt act, it is treason.

Where a man doth compass or imagine the death of the king's eldest son and heir, if it appear by any overt act, it is treason.

Where a man doth violate the king's wife, it is treason.

Where a man doth violate the king's eldest daughter unmarried, it is treason.

Where a man doth violate the wife of the king's eldest son and heir, it is treason.

Where a man doth levy war against the king and his realm, it is treason.

Where a man is adherent to the king's enemies, giving them aid and comfort, it is treason.

Where a man counterfeiteth the king's great seal, it is treason.

Where a man counterfeiteth the king's privy seal, it is treason.

Where a man counterfeiteth the king's privy signet, it is treason.

Where a man doth counterfeit the king's sign manual, it is treason.

Where a man counterfeits the king's money, it is treason.

Where a man bringeth into the realm false money, counterfeited to the likeness of the coin of England, with intent to merchandise or make payment therewith, and knowing it to be false, it is treason.

Where a man counterfeiteth any foreign coin current in payment within this realm, it is treason.

Where a man doth bring in foreign money, being current within the realm, the same being false and counterfeit, with intent to utter it, and knowing the same to be false, it is treason.

Where a man doth clip, wash, round, or file any of the king's money, or any foreign coin current by proclamation, for gain's sake, it is treason.

Where a man doth any ways impair, diminish, falsify, scale, or lighten the king's money, or any foreign moneys current by proclamation, it is treason.

Where a man killeth the chancellor, being in his place and doing his office, it is treason.

Where a man killeth the treasurer, being in his place and doing his office, it is treason.

Where a man killeth the king's justice in eyre, being in his place and doing his office, it is treason.

Where a man killeth the king's justice of assize, being in his place and doing his office, it is treason.

Where a man killeth the king's justice of Oyer and Terminer, being in his place and doing his office, it is treason.

Where a man doth persuade or withdraw any of the king's subjects from his obedience, or from the religion by his majesty established, with intent to withdraw him from the king's obedience, it is treason.

Where a man is absolved, reconciled, or withdrawn from his obedience to the king, or promiseth his obedience to any foreign power, it is treason.

Where any Jesuit, or other priest ordained since the first year of the reign of Queen Eliza-

beth, shall come into, or remain in any part of this realm, it is treason.

Where any person being brought up in a college of Jesuits, or seminary, shall not return within six months after proclamation made, and within two days after his return submit himself to take the oath of supremacy, if otherwise he do return, or be within the realm, it is treason.

Where a man doth affirm or maintain any authority of jurisdiction spiritual, or doth put in use or execute any thing for the advancement or setting forth thereof, such offence, the third time committed, is treason.

Where a man refuseth to take the oath of supremacy, being tendered by the bishop of the diocese, if he be an ecclesiastical person; or by commission out of the chancery, if he be a temporal person; such offence the second time is treason.

Where a man committed for treason doth voluntarily break prison, it is treason.

Where a jailor doth voluntarily permit a man committed for treason to escape, it is treason.

Where a man procureth or consenteth to a treason, it is treason.

Where a man relieveth or comforteth a traitor, knowing it, it is treason.

The punishment, trial, and proceedings, in cases of treason.

In treason, the corporal punishment is by drawing on a hurdle from the place of the prison to the place of execution, and by hanging and being cut down alive, bowelling, and quartering: and in women by burning.

In treason there ensueth a corruption of blood in the line ascending and descending.

In treason, lands and goods are forfeited, and inheritances, as well entailed as fee simple, and the profits of estates for life.

In treason, the escheats go to the king, and not to the lord of the fee.

In treason, the lands forfeited shall be in the king's actual possession without office.

In treason there be no accessaries, but all are principals.

In treason, no benefit of clergy, or sanctuary, or peremptory challenge.

In treason, if the party stand mute, yet nevertheless judgment and attainder shall proceed all one as upon verdict.

In treason, bail is not permitted.

In treason, no counsel is to be allowed to the party.

In treason, no witness shall be received upon oath for the party's justification

In treason, if the fact be committed beyond the seas, yet it may be tried in any country where the king will award his commission.

In treason, if the party be "non sanæ memoriæ," yet if he had formerly confessed it before the king's counsel, and that it be certified that he was of good memory at the time of his examination and confession, the court may proceed to judgment without calling or arraigning the party.

In treason, the death of the party before conviction dischargeth all proceeding and forfeitures.

In treason, if the party be once acquitted, he shall not be brought in question again for the same fact.

In treason, no new case, not expressed in the statute of 25 Ed. III., nor made treason by any special statute since, ought to be judged treason, without consulting with the parliament.

In treason, there can be no prosecution but at the king's suit, and the king's pardon dischargeth.

In treason, the king cannot grant over to any subject power and authority to pardon it.

In treason, a trial of a peer of the kingdom is to be by special commission before the lord high steward, and those that pass upon him to be none but peers: and the proceeding is with great solemnity, the lord steward sitting under a cloth of estate with a white rod of justice in his hand: and the peers may confer together, but are not any ways shut up: and are demanded by the lord steward their voices one by one, and the plurality of voices carrieth it. In treason, it hath been an ancient use and favour from the kings of this realm to pardon the execution of hanging, drawing, and quartering; and to make warrant for their beheading.

The proceeding in case of treason with a common subject is in the king's bench, or by commission of Oyer and Terminer.

MISPRISION OF TREASON.

Cases of misprision of treason.

Where a man concealeth high treason only, without any comforting or abetting, it is misprision of treason.

Where a man counterfeiteth any foreign coin of gold or silver not current in the realm, it is misprision of treason.

The punishment, trial, and proceeding, in cases of misprision of treason.

The punishment of misprision of treason is by perpetual imprisonment, loss of the issues of their lands during life, and loss of goods and chattels.

The proceeding and trial is, as in cases of treason.

In misprision of treason, bail is not admitted.

PETIT TREASON.

Cases of petit treason.

Where the servant killeth the master, it is petit treason.

Where the wife killeth her husband, it is petit treason.

Where a spiritual man killeth his prelate, to whom he is subordinate, and oweth faith and obedience, it is petit treason.

Where the son killeth the father or mother, it hath been questioned whether it be petit treason, and the late experience and opinion seemeth to weigh to the contrary, though against law and reason, in my judgment.

The punishment, trial, and proceeding in cases of petit treason.

In petit treason, the corporal punishment is by drawing on a hurdle, and hanging, and in a woman, burning.

In petit treason, the forfeiture is the same with the case of felony.

In petit treason, all accessaries are but in case of felony.

FELONY.

Cases of felony.

Where a man committeth murder, that is, homicide of prepensed malice, it is felony.

Where a man committeth manslaughter, that is, homicide of sudden heat, and not of malice prepensed, it is felony.

Where a man committeth burglary, that is, breaking of a house with an intent to commit felony, it is felony.

Where a man rideth armed, with a felonious intent, it is felony.

Where a man doth maliciously and feloniously burn a house, it is felony.

Where a man doth maliciously and feloniously burn corn upon the ground or in stacks, it is felony.

Where a man doth maliciously cut out another's tongue, or put out his eyes, it is felony.

Where a man robbeth or stealeth, that is, taketh away another man's goods, above the value of twelve pence, out of his possession, with an intent to conceal it, it is felony.

Where a man embezzleth or withdraweth any of the king's records at Westminster, whereby any judgment is reversed, it is felony.

Where a man that hath custody of the king's armour, munition, or other habiliments of war, doth maliciously convey away the same, to the value of twenty shillings, it is felony.

Where a servant hath goods of his master's delivered unto him, and goeth away with them, it is felony.

Where a man conjures, or invocates wicked spirits, it is felony.

Where a man doth use or practise any manner of witchcraft, whereby any person shall be killed, wasted, or lamed in his body, it is felony.

Where a man practiseth any witchcraft, to discover treasure hid, or to discover stolen goods, or to provoke unlawful love, or to impair or hurt any man's cattle or goods, the second time, having been once before convicted of the like offence, it is felony.

Where a man useth the craft of multiplication of gold or silver, it is felony.

Where a man committeth rape, it is felony.

Where a man taketh away a woman against her will, not claiming her as his ward or bondwoman, it is felony.

Where any person marrieth again, her or his former husband or wife being alive, it is felony.

Where a man committeth buggery with man or beast, it is felony.

Where any persons above the number of twelve, shall assemble themselves with intent to put down enclosures, or bring down the prices of victuals, &c., and do not depart after proclamation, it is felony.

Where man shall use any words to encourage or draw any people together, "ut supra," and they do assemble accordingly, and do not depart after proclamation, it is felony.

Where a man being the king's sworn servant, conspireth to murder any lord of the realm or any of the privy council, it is felony.

Where a soldier hath taken any parcel of the king's wages, and departeth without license, it is felony.

Where a man receiveth a seminary priest, knowing him to be such a priest, it is felony.

Where a recusant, which is a seducer, and persuader, and inciter of the king's subjects against the king's authority in ecclesiastical causes, or a persuader of conventicles, &c., shall refuse to abjure the realm, it is felony.

Where vagabonds be found in the realm, calling themselves Egyptians, it is felony.

Where a purveyor taketh without warrant, or otherwise doth offend against certain special laws, it is felony.

Where a man hunteth in any forest, park, or warren by night or by day, with vizards or other disguisements, and is examined thereof and concealeth his fact, it is felony.

Where a man stealeth certain kinds of hawks, it is felony.

Where a man committeth forgery the second time, having been once before convicted, it is felony.

Where a man transporteth rams or sheep out of the king's dominions, the second time, it is felony.

Where a man being imprisoned for felony, breaks prison, it is felony.

Where a man procureth or consenteth to a felony to be committed, it is felony, as to make him accessary before the fact.

Where a man receiveth or relieveth a felon, knowing thereof, it is felony, as to make him accessary after the fact.

Where a woman, by the constraint of her husband, in his presence, joineth with him in com-

mitting of felony, it is not felony, neither as principal nor as accessary.

The punishment, trial, and proceeding in cases of felony.

In felony, the corporal punishment is by hanging, and it is doubtful whether the king may turn it into beheading in the case of a peer or other person of dignity, because in treason the striking off the head is part of the judgment, and so the king pardoneth the rest: but in felony it is no part of the judgment, and the king cannot alter the execution of law; yet precedents have been both ways.

In felony, there followeth corruption of blood, except it be in cases made felony by special statutes, with a proviso that there shall be no corruption of blood.

In felony, lands in fee simple and goods are forfeited, but not lands entailed, and the profits of estates for life are likewise forfeited: And by some customs lands in fee simple are not forfeited;

The father to the bough, son to the plough;

as in Gavelkind in Kent, and other places.

In felony, the escheats go to the lord of the fee, and not to the king, except he be lord: But the profits of estates for lives, or in tail during the life of tenant in tail, go to the king: and the king hath likewise, in fee simple lands holden of common lords, "annum, diem, et vastum."

In felony, the lands are not in the king before office, nor in the lord before entry or recovery in writ of escheat, or death of the party attainted.

In felony, there can be no proceeding with the accessary before there be a proceeding with the principal; which principal if he die, or plead his pardon, or have his clergy before attainder, the accessaries can never be dealt with.

In felony, if the party stand mute, and will not put himself upon his trial, or challenge peremptorily above the number that the law allows, he shall have judgment not of hanging, but of penance of pressing to death; but then he saves his lands, and forfeits only his goods.

In felony, at the common law, the benefit of clergy or sanctuary was allowed; but now by statutes it is taken away in most cases.

In felony, bail may be admitted where the fact is not notorious, and the person not of evil fame.

In felony, no counsel is to be allowed to the party, no more than in treason.

In felony, no witness shall be received upon oath for the party's justification, no more than in treason.

In felony, if the fact be committed beyond the seas, or upon the seas, "super altum mare," there is no trial at all in the one case, nor by course of jury in the other case, but by the jurisdiction of the admiralty.

In felony, if the party be "non sanæ memoriæ," although it be after the fact, he cannot be tried nor adjudged, except it be in course of outlawry, and that is also erroneous.

In felony, the death of the party before conviction dischargeth all proceeding and forfeitures.

In felony, if the party be once acquitted, or in peril of judgment of life lawfully, he shall never be brought in question again for the same fact.

In felony, the prosecution may be either at the king's suit by way of indictment, or the party's suit by way of appeal; and if it be by way of appeal, the defendant shall have his counsel, and produce witnesses upon oath, as in civil causes.

In felony, the king may grant hault justice to a subject, with the regality of power to pardon it.

In felony, the trial of peers is all one as in case of treason.

In felony, the proceedings are in the king's bench, or before commissioners of Oyer and Terminer, or of gaol delivery, and in some cases before justices of peace.

Cases of Felonia de se, *with the punishment, trial, and proceeding therein.*

In the civil law, and other laws, they make a difference of cases of "felonia de se:" for where a man is called in question upon any capital crime, and killeth himself to prevent the law, they give the same judgment in all points of forfeiture, as if they had been attainted in their lifetime; And on the other side, where a man killeth himself upon impatience of sickness or the like, they do not punish it at all: but the law of England taketh it all in one degree, and punisheth it only with loss of goods to be forfeited to the king, who generally granteth them to his almoner, where they be not formerly granted unto special liberties.

OFFENCES OF PRÆMUNIRE.

Cases of Præmunire.

Where a man purchaseth or accepteth any provision, that is, collation of any spiritual benefice or living, from the see of Rome, it is case of præmunire.

Where a man will purchase any process to draw any people of the king's allegiance out of the realm, in plea, whereof the cognisance pertains to the king's court, and cometh not in person to answer his contempt in that behalf before the king and his council, or in his chancery, it is case of præmunire.

Where a man doth sue in any court which is not the king's court, to defeat or impeach any judgment given in the king's court, and doth not appear to answer his contempt, it is case of præmunire.

Where a man doth purchase or pursue in the court of Rome, or elsewhere, any process, sen-

tence of excommunication, bull, instrument, or other thing which touches the king in his regality, or his realm in prejudice, it is case of præmunire.

Where a man doth affirm or maintain any foreign authority of jurisdiction spiritual, or doth put in use or execute any thing for the advancement or setting forth thereof; such offence, the second time committed, is case of præmunire.

Where a man refuseth to take the oath of supremacy, being tendered by the bishop of the diocese, if he be an ecclesiastical person; or by commission out of the chancery, if he be a temporal person, it is case of præmunire.

Where the dean and chapter of any church, upon the "Congé d'elire" of an archbishop, or bishop, doth refuse to elect any such archbishop or bishop as is nominated unto them in the king's letter missive, it is case of præmunire.

Where a man doth contribute or give relief unto any Jesuit or seminary priest, or to any college of Jesuits or seminary priests, or to any person brought up therein, and called home, and not returning, it is case of præmunire.

Where a man is broker of a usurious contract above ten in the hundred, it is case of præmunire.

The punishment, trial, and proceedings in cases of præmunire.

The punishment is by imprisonment during life, forfeiture of goods, forfeiture of lands in fee simple, and forfeiture of the profits of lands entailed, or for life.

The trial and proceeding is as in cases of misprision of treason; and the trial is by peers, where a peer of the realm is the offender.

OFFENCES OF ABJURATION AND EXILE.

Cases of abjuration and exile, and the proceedings therein.

Where a man committeth any felony, for the which at this day he may have privilege of sanctuary, and taketh sanctuary, and confesseth the felony before the coroner, he shall abjure the liberty of the realm, and choose his sanctuary; and if he commit any new offence, or leave his sanctuary, he shall lose the privilege thereof, and suffer as if he had not taken sanctuary.

Where a man not coming to the church, and, being a popish recusant, doth persuade any of the king's subjects to impugn his majesty's authority in causes ecclesiastical, or shall persuade any subject from coming to church, or receiving the communion, or persuade any subject to come to any unlawful conventicles, or shall be present at any such unlawful conventicles, and shall not after conform himself within a time, and make his submission, he shall abjure the realm, and forfeit his goods and lands during life; and if he depart not within the time prefixed, or return, he shall be in the degree of a felon.

Where a man being a popish recusant, and not having lands to the value of twenty marks per annum, nor goods to the value of 40*l.*, shall not repair to his dwelling or place where he was born, and there confine himself within the compass of five miles, he shall abjure the realm; and if he return, he shall be in the degree of a felon.

Where a man kills the king's deer in chases or forests, and can find no sureties after a year's imprisonment, he shall abjure the realm.

Where a man is a trespasser in parks, or in ponds of fish, and after three years' imprisonment cannot find sureties, he shall abjure the realm.

Where a man is a ravisher of any child within age, whose marriage belongs to any person, and marrieth the said child after years of consent, and is not able to satisfy for the marriage, he shall abjure the realm.

OFFENCE OF HERESY.

Cases of heresy, and the trial and proceedings therein.

The declaration of heresy, and likewise the proceeding and judgment upon heretics, is by the common laws of this realm referred to the jurisdiction ecclesiastical, and the secular arm is reached unto them by the common laws, and not by any statute for the execution of them by the king's writ "de hæretico comburendo."

CASES OF THE KING'S PREROGATIVE.

The king's prerogative in parliament.

1. The king hath an absolute negative voice to all bills that pass the parliament, so as without his royal assent they have a mere nullity, and not so much as "authoritas præscripta," as "senatus consulta" had, notwithstanding the intercession of tribunes.

2. The king may summon parliaments, dissolve them, adjourn and prorogue them at his pleasure.

3. The king may add voices in parliament at his pleasure, for he may give privileges to borough towns, and call and create barons at his pleasure.

4. No man can sit in parliament unless he take the oath of allegiance.

The king's prerogative in war and peace.

1. The king hath power to declare and proclaim war, and make and conclude peace.

2. The king hath power to make leagues and confederacies with foreign estates, more or less strait, and to revoke and disannul them at his pleasure.

3. The king hath power to command the bodies of his subjects for service of his wars, and to muster, train, and levy men, and to transport them by sea or land, at his pleasure.

4. The king hath power in time of war to exe-

cute martial law, and to appoint all officers of war at his pleasure.

5. The king hath power to grant his letters of mart and reprisal for remedy to his subjects upon foreign wrongs.

6. The king may give knighthood, and thereby enable any subject to perform knight's service.

The king's prerogative in matter of money.

1. The king may alter his standard in baseness or fineness.

2. The king may alter his stamp in the form of it.

3. The king may at his pleasure alter the valuations, and raise and fall moneys.

4. The king may by proclamation make money of his own current or not.

5. The king may take or refuse the subjects' bullion, or coin for more or less money.

6. The king by proclamation may make foreign money current, or not.

The king's prerogative in matters of trade and traffic.

1. The king may constrain the person of any of his subjects not to go out of the realm.

2. The king may restrain any of his subjects to go out of the realm in any special part foreign.

3. The king may forbid the exportation of any commodities out of the realm.

4. The king may forbid the importation of any commodities into this realm.

5. The king may set a reasonable impost upon any foreign wares that come into the realm, and so of native wares that go out of the realm.

The king's prerogative in the persons of his subjects.

1. The king may create any corporation or body politic, and enable them to purchase, to grant, to sue, and be sued; and with such restrictions and limitations as he pleases.

2. The king may denizen and enable any foreigner for him and his descendants after the charter; though he cannot naturalize, nor enable him to make pedigree from ancestors paramount.

3. The king may enable any attainted person, by his charter of pardon, and purge the blood for time to come, though he cannot restore the blood for the time past.

4. The king may enable any dead persons in the law, as men professed in religion, to take and purchase to the king's benefit.

A twofold power of the law.

1. A direction: in this respect the king is underneath the law; because his acts are guided thereby.

2. Correction: In this respect the king is above the law; for it may not correct him for any offence.

A twofold power in the king.

1. His absolute power, whereby he may levy forces against any nation.

2. His limited power, which is declared and expressed in the laws what he may do.

THE

ARGUMENT OF SIR FRANCIS BACON, KNIGHT,

HIS MAJESTY'S SOLICITOR-GENERAL,

IN THE CASE OF

THE POST-NATI OF SCOTLAND,

IN THE EXCHEQUER CHAMBER,

BEFORE THE LORD CHANCELLOR, AND ALL THE JUDGES OF ENGLAND.

MAY IT PLEASE YOUR LORDSHIPS,

THIS case your lordships do well perceive to be of exceeding great consequence. For whether you do measure that by place, that reacheth not only to the realm of England, but to the whole island of Great Britain: or whether you measure that by time, that extendeth not only to the present time, but much more to future generations,

Et nati natorum, et qui nascentur ab illis:

And, therefore, as that is to receive at the bar a full and free debate, so I doubt not but that shall receive from your lordships a sound and just resolution according to law, and according to truth.

For, my lords, though he were thought to have said well, that said that for his word, "Rex fortissimus;" yet he was thought to have said better, even in the opinion of the king himself, that said, "Veritas fortissima, et prævalet:" And I do much rejoice to observe such a concurrence in the whole carriage of this cause to this end, that truth may prevail.

The case no feigned or framed case; but a true case between true parties.

The title handled formerly in some of the king's courts, and freehold upon it; used indeed by his majesty in his high wisdom to give an end to this great question, but not raised; "occasio," as the schoolmen say, "arrepta, non porrecta."

The case argued in the king's bench by Mr. Walter with great liberty, and yet with good approbation of the court; the persons assigned to be of counsel on that side, inferior to none of their quality and degree in learning; and some of them most conversant and exercised in the question.

The judges in the king's bench have adjourned it to this place for conference with the rest of their brethren. Your lordship, my lord chancellor, though you be absolute judge in the court where you sit, and might have called to you such assistance of judges as to you had seemed good; yet would not forerun or lead in this case by any opinion there to be given; but have chosen rather to come yourself to this assembly; all tending, as I said, to this end, whereunto I for my part do heartily subscribe, "ut vincat veritas," that truth may first appear, and then prevail. And I do firmly hold, and doubt not but I shall well maintain, that this is the truth, that Calvin the plaintiff is "ipso jure," by the law of England, a natural born subject, to purchase freehold, and to bring real actions within England. In this case I must so consider the time, as I must much more consider the matter. And, therefore, though it may draw my speech into farther length; yet I dare not handle a case of this nature confusedly, but purpose to observe the ancient and exact form of pleadings; which is,

First, to explain or induce.

Then, to confute, or answer objections.

And, lastly, to prove, or confirm.

And, first, for explanation. The outward question in this case is no more, but, Whether a child, born in Scotland since his majesty's happy coming to the crown of England, be naturalized in England, or no? But the inward question or state of the question evermore beginneth where that which is confessed on both sides doth leave.

It is confessed, that if these two realms of England and Scotland were united under one law and one parliament, and thereby incorporated and made as one kingdom, that the "post-natus" of such a union should be naturalized.

It is confessed, that both realms are united in the person of our sovereign; or, because I will gain nothing by surreption, in the putting of the question, that one and the same natural person is king of both realms.

It is confessed, that the laws and parliaments are several. So, then, Whether this privilege and benefit of naturalization to be an accessory or dependency upon that which is one and joint, or upon that which is several, hath been, and must be the depth of this question. And therefore your lordships do see the state of this question doth evidently lead me by way of inducement to speak of three things: The king, the law, and the privilege of naturalization. For if you well understand the nature of the two principals, and again the nature of the accessory; then shall you discern, to whether principal the accessory doth properly refer, as a shadow to a body, or iron to an adamant.

And therefore your lordships will give me leave, in a case of this quality, first to visit and open the foundations and fountains of reason, and not begin with the positions and eruditions of municipal law; for so was that done in the great case of mines; and so ought that to be done in all cases of like nature. And this doth not at all detract from the sufficiency of our laws, as incompetent to decide their own cases, but rather addeth a dignity unto them, when their reason appearing as well as their authority, doth show them to be as fine moneys, which are current not only by the stamp, because they are so received, but by the natural metal, that is, the reason and wisdom of them.

And Master Littleton himself in his whole book doth commend but two things to the professors of the law by the name of his sons; the one, the inquiring and searching out the reasons of the law; and the other, the observing of the forms of pleadings. And never was there any case that came in judgment that required more, that Littleton's advice should be followed in those two points, than doth the present case in question. And, first, of the king.

It is evident that all other commonwealths, monarchies only excepted, do subsist by a law precedent. For where authority is divided amongst many officers, and they not perpetual, but annual or temporary, and not to receive their authority but by election, and certain persons to have voice only to that election, and the like; these are busy and curious frames, which of necessity do presuppose a law precedent, written or unwritten, to guide and direct them: but in monarchies, especially hereditary, that is, when several families or lineages of people do submit themselves to one line, imperial or royal, the submission is more natural and simple, which afterwards by laws subsequent is perfected and made more formal; but that is grounded upon nature. That this is so, it appeareth notably in two things; the one the platforms and patterns which

are found in nature of monarchies; the original submissions, and their motives and occasions. The platforms are three:

The first is that of a father, or chief of a family; who, governing over his wife by prerogative of sex, over his children by prerogative of age, and because he is author unto them of being, and over his servants by prerogative of virtue and providence, (for he that is able of body, and improvident of mind, is "natura servus,") that is the very model of a king. So is the opinion of Aristotle, lib. iii. Pol. cap. 14, where he saith, "Verum autem regnum est, cum penes unum est rerum summa potestas: quod regnum procurationem familiæ imitatur."

And therefore Lycurgus, when one counselled him to dissolve the kingdom, and to establish another form of estate, answered, "Sir, begin to do that which you advise first at home in your own house:" noting, that the chief of a family is as a king; and that those that can least endure kings abroad, can be content to be kings at home. And this is the first platform, which we see is merely natural.

The second is that of a shepherd and his flock, which, Xenophon saith, Cyrus had ever in his mouth. For shepherds are not owners of the sheep; but their office is to feed and govern: no more are kings proprietaries or owners of the people: for God is sole owner of the people. "The nations," as the Scripture saith, are "his inheritance:" but the office of kings is to govern, maintain, and protect people. And that is not without a mystery, that the first king that was instituted by God, David, for Saul was but an untimely fruit, was translated from a shepherd, as you have it in Psalm lxxviii. "Et elegit David servum suum, de gregibus ovium sustulit eum,—pascere Jacob servum suum, et Israel hæreditatem suam." This is the second platform; a work likewise of nature.

The third platform is the government of God himself over the world, whereof lawful monarchies are a shadow. And, therefore, both amongst the heathen, and amongst the Christians, the word, sacred, hath been attributed unto kings, because of the conformity of a monarchy with a divine majesty: never to a senate or people. And so you find it twice in the Lord Coke's Reports; once in the second book, the bishop of Winchester's case; and in his fifth book, Cawdrie's case; and, more anciently, in the 10 of H. VII. fol. 10. "Rex est persona mixta cum sacerdote;" an attribute which the senate of Venice, or a canton of Swisses, can never challenge. So, we see, there be precedents or platforms of monarchies, both in nature and above nature; even from the monarch of heaven and earth, to the king, if you will, in a hive of bees. And therefore other states are the creatures of law: and this state only subsisteth by nature.

For the original submissions, they are four in number: I will briefly touch them: The first is paternity or patriarchy, which was when a family growing so great as it could not contain itself within one habitation, some branches of the descendants were forced to plant themselves into new families, which second families could not by a natural instinct and inclination but bear a reverence, and yield an obeisance to the eldest line of the ancient family from which they were derived.

The second is, the admiration of virtue, or gratitude towards merit, which is likewise naturally infused into all men. Of this Aristotle putteth the case well, when it was the fortune of some one man, either to invent some arts of excellent use towards man's life, or to congregate people, that dwelt scattered, into one place, where they might cohabit with more comfort, or to guide them from a more barren land to a more fruitful, or the like: upon these deserts, and the admiration and recompense of them, people submitted themselves.

The third, which was the most usual of all, was conduct in war, which even in nature induceth as great an obligation as paternity. For as men owe their life and being to their parents in regard of generation, so they owe that also to saviours in the wars in regard of preservation. And therefore we find in chap. xviii. of the book of Judges, ver. 22, "Dixerunt omnes viri ad Gideon, Dominare nostri, tu et filii tui, quoniam servasti nos de manu Madian." And so we read, when it was brought to the ears of Saul, that the people sung in the streets, "Saul hath killed his thousands, and David his ten thousand of enemies," he said straightways: "Quid ei superest nisi ipsum regnum?" For whosoever hath the military dependence, wants little of being king.

The fourth in an enforced submission, which is conquest, whereof it seemed Nimrod was the first precedent, of whom it is said; "Ipse cœpit potens esse in terra, et erat robustus venator coram Domino." And this likewise is upon the same root, which is the saving or gift as it were of life and being; for the conqueror hath power of life and death over his captives; and, therefore, where he giveth them themselves, he may reserve upon such a gift what service and subjection he will. All these four submissions are evident to be natural and more ancient than law.

To speak therefore of law, which is the second part of that which is to be spoken of by way of inducement. Law no doubt is the great organ by which the sovereign power doth move, and may be truly compared to the sinews in a natural body, as the sovereignty may be compared to the spirits: for if the sinews be without the spirits, they are dead and without motion; if the spirits move in weak sinews, it causeth trembling: so the laws, without the king's power, are dead; the king's power, except the laws be corrob-

rated, will never move constantly, but be full of staggering and trepidation. But towards the king himself the law doth a double office or operation: the first is to entitle the king, or design him: and in that sense Bracton saith well, lib. 1. fol. 5, and lib. 3, fol. 107. "Lex facit quod ipse sit Rex;" that is, it defines his title; as in our law, That the kingdom shall go to the issue female; that it shall not be departable amongst daughters; that the half-blood shall be respected, and other points differing from the rules of common inheritance. The second is, that whereof we need not fear to speak in good and happy times, such as these are, to make the ordinary power of the king more definite or regular; for it was well said by a father, "plenitudo potestatis est plenitudo tempestatis." And although the king, in his person, be "solutus legibus," yet his acts and grants are limited by law, and we argue them every day.

But I demand, Do these offices or operations of law evacuate or frustrate the original submission, which was natural? Or shall it be said that all allegiance is by law? No more than it can be said, that "potestas patris," the power of the father over the child, is by law; and yet no doubt laws do diversely define of that also; the law of some nations having given the fathers power to put their children to death; others, to sell them thrice; others, to disinherit them by testament at pleasure, and the like. Yet no man will affirm, that the obedience of the child is by law, though laws in some points do make it more positive: and even so it is of allegiance of subjects to hereditary monarchs, which is corroborated and confirmed by law, but is the work of the law of nature. And therefore you shall find the observation true, and almost general in all states, that their lawgivers were long after their first kings, who governed for a time by natural equity without law: so was Theseus long before Solon in Athens: so was Eurytion and Sous long before Lycurgus in Sparta: so was Romulus long before the Decemviri. And even amongst ourselves there were more ancient kings of the Saxons; and yet the laws ran under the name of Edgar's laws. And in the refounding of the kingdom in the person of William the Conqueror, when the laws were in some confusion for a time, a man may truly say, that King Edward I. was the first lawgiver who, enacting some laws, and collecting others, brought the law to some perfection. And therefore I will conclude this point with the style which divers acts of parliaments do give unto the king: which term him, very effectually and truly, "our natural, sovereign, liege lord." And as it was said by a principal judge here present, when he served in another place, and question was moved by some occasion of the title of Bullein's lands, that he would never allow that Queen Elizabeth (I remember it for the efficacy of the phrase) should be a statute queen, but a common-law queen: so surely I shall hardly consent that the king shall be esteemed or called only our rightful sovereign, or our lawful sovereign, but our natural liege sovereign; as acts of parliament speak: for as the common law is more worthy than the statute law; so the law of nature is more worthy than them both. Having spoken now of the king and the law, it remaineth to speak of the privilege and benefit of naturalization itself; and that according to the rules of the law of England.

Naturalization is best discerned in the degrees whereby the law doth mount and ascend thereunto. For it seemeth admirable unto me, to consider with what a measured hand and with how true proportions our law doth impart and confer the several degrees of this benefit. The degrees are four.

The first degree of persons, as to this purpose, that the law takes knowledge of, is an alien enemy; that is, such a one as is born under the obeisance of a prince or state that is in hostility with the King of England. To this person the law giveth no benefit or protection at all, but if he come into the realm after war proclaimed, or war in fact, he comes at his own peril, he may be used as an enemy: for the law accounts of him, but, as the Scripture saith, as of a spy that comes to see the weakness of the land. And so it is in 2 Ric. III. fol. 2. Nevertheless this admitteth a distinction. For if he come with safe-conduct, otherwise it is: for then he may not be violated, either in person or goods. But yet he must fetch his justice at the fountain-head, for none of the conduit pipes are open to him; he can have no remedy in any of the king's courts; but he must complain himself before the king's privy council: there he shall have a proceeding summary from hour to hour, the cause shall be determined by natural equity, and not by rules of law; and the decree of the council shall be executed by aid of the chancery, as in 13 Ed. IV.; and this is the first degree.

The second person is an alien friend, that is, such a one as is born under the obeisance of such a king or state as is confederate with the king of England, or at least not in war with him. To this person the law allotteth this benefit, that as the law accounts that the hold it hath over him, is but a transitory hold, for he may be an enemy, so the law doth indue him but with a transitory benefit, that is, of movable goods and personal actions. But for freehold, or lease, or actions real or mixed, he is not enabled, except it be in "autre droit." And so it is 9 E. IV. fol. 7; 19 E IV. fol. 6; 5 Mar., and divers other books.

The third person is a denizen, using the word properly, for sometimes it is confounded with a natural born subject. This is one that is but "subditus insitivus," or "adoptivus," and is never by birth, but only by the king's charter, and by no

other mean, come he never so young into the realm, or stay he never so long. Mansion or habitation will not idenize him, no, nor swearing obedience to the king in a leet, which doth in-law the subject; but only, as I said, the king's grace and gift. To this person the law giveth an ability and capacity abridged, not in matter, but in time, and as there was a time when he was not subject, so the law doth not acknowledge him before that time. For if he purchase freehold after his denization, he may take it; but if he have purchased any before, he shall not hold it: so if he have children after, they shall inherit; but if he have any before, they shall not inherit. So as he is but privileged "a parte post," as the schoolmen say, and not "a parte ante."

The fourth and last degree is a natural born subject, which is evermore by birth, or by act of parliament; and he is complete and entire. For in the law of England there is "nil ultra," there is no more subdivision or more subtle division beyond these; and therein it seemeth to me that the wisdom of the law, as I said, is to be admired both ways, both because it distinguisheth so far, and because it doth not distinguish farther. For I know that other laws do admit more curious distinction of this privilege; for the Romans had, besides "jus civitatis," which answereth to naturalization, "jus suffragii." For although a man were naturalized to take lands and inheritance, yet he was not enabled to have a voice at passing of laws, or at election of officers. And yet farther they have "jus petitionis," or "jus honorum." For though a man had voice, yet he was not capable of honour and office. But these be the devises commonly of popular or free estates, which are jealous whom they take into their number, and are unfit for monarchies: but by the law of England, the subject of that is natural born hath a capacity or ability to all benefits whatsoever; I say capacity or ability: but to reduce "potentiam in actum," is another case. For an earl of Ireland, though he be naturalized in England, yet hath no voice in the parliament of England, except we have either a call by writ, or creation by patent; but he is capable of either. But upon this quadripartite division of the ability of persons I do observe to your lordships three things, being all effectually pertinent to the question in hand.

The first is, that if any man conceive that the reason for the post-nati might serve as well for the ante-nati, he may by the distribution which we have made plainly perceive his error. For the law looketh not back, and therefore cannot by any matter "ex post facto," after birth, alter the state of the birth; wherein no doubt the law hath a grave and profound reason; which is this, in a few words, "Nemo subito fingitur; aliud est nasci, aliud fieri:" we indeed more respect and affect those worthy gentlemen of Scotland whose merits and conversations we know; but the law that proceeds upon general reason, and looks upon no men's faces, affecteth and privilegeth those which drew their first breath under the obeisance of the King of England.

The second point is, that by the former distribution it appeareth that there be but two conditions by birth, either alien or natural born, "nam tertium penitus ignoramus." It is manifest, then, that if the post-nati of Scotland be not natural born, they are alien born, and in no better degree at all than Flemings, French, Italians, Spanish, Germans, and others, which are all at this time alien friends, by reason his majesty is in peace with all the world.

The third point seemeth to me very worthy the consideration; which is, that in all the distributions of persons, and the degrees of abilities or capacities, the king's act is all in all, without any manner of respect to law or parliament. For it is the king that makes an alien enemy, by proclaiming a war, wherewith the law or parliament intermeddles not. So the king only grants safe conducts, wherewith law and parliament intermeddle not. It is the king likewise that maketh an alien friend, by concluding a peace, wherewith law and parliament intermeddle not. It is the king that makes a denizen by his charter, absolutely of his prerogative and power, wherewith law and parliament intermeddle not. And therefore it is strongly to be inferred, that as all these degrees depend wholly upon the king's act, and no ways upon law or parliament; so the fourth, although it cannot by the king's patent, but by operation of law, yet that the law, in that operation, respecteth only the king's person, without respect of subjection to law or parliament. And thus much by way of explanation and inducement: which being all matter in effect confessed, is the strongest groundwork to that which is contradicted or controverted.

There followeth the confutation of the arguments on the contrary side.

That which hath been materially objected, may be reduced to four heads.

The first is, that the privilege of naturalization followeth allegiance, and that allegiance followeth the kingdom.

The second is drawn from that common ground, "cum duo jura concurrent in una persona æquam est ac si essent in duobus:" a rule, the words whereof are taken from the civil law; but the matter of it is received in all laws; being a very line or rule of reason, to avoid confusion.

The third consisteth of certain inconveniences conceived to ensue of this general naturalization, "ipso jure."

The fourth is not properly an objection, but a pre-occupation of an objection or proof on our part, by a distinction devised between countries devolute by descent, and acquired by conquest.

For the first, it is not amiss to observe the

those who maintain this new opinion, whereof there is "altum silentium" in our books of law, are not well agreed in what form to utter and express that: for some said that allegiance hath respect to the law, some to the crown, some to the kingdom, some to the body politic of the king: so there is confusion of tongues amongst them, as it commonly cometh to pass in opinions that have their foundations in subtlety and imagination of man's wit, and not in the ground of nature. But to leave their words, and to come to their proofs: they endeavour to prove this conceit by three manner of proofs: first, by reason; then, by certain inferences out of statutes; and, lastly, by certain book cases, mentioning and reciting the forms of pleadings.

The reason they bring is this; that naturalization is an operation of the law of England; and so indeed it is, that may be the true genus of it.

Then they add, that granted, that the law of England is of force only within the kingdom and dominions of England, and cannot operate but where it is in force. But the law is not in force in Scotland, therefore that cannot endure this benefit of naturalization by a birth in Scotland.

This reason is plausible and sensible, but extremely erroneous. For the law of England, for matters of benefit or forfeitures in England, operateth over the world. And because it is truly said that "respublica continetur pœna et prœmio," I will put a case or two of either.

It is plain that if a subject of England had conspired the death of the king in foreign parts, it was by the common law of England treason. How prove I that? By the statutes of 35 H. VIII. cap. 2, wherein you shall find no words at all of making any new case of treason which was not treason before, but only of ordaining a form of trial; "ergo," it was treason before: and if so, then the law of England works in foreign parts. So of contempts, if the king send his privy seal to any subject beyond the seas, commanding him to return, and he disobey, no man will doubt but there is a contempt, and yet the fact enduring the contempt was committed in foreign parts.

Therefore the law of England doth extend to acts or matters done in foreign parts. So of reward, privilege or benefit, we need seek no other instance than the instance in question: for I will put you a case that no man shall deny, where the law of England doth work and confer the benefit of naturalization upon a birth neither within the dominions of the kingdom, nor King of England. By the statute of 25 E. III., which, if you will believe Hussey, is but a declaration of the common law, all children born in any parts of the world, if they be of English parents continuing at that time as liege subjects to the king, and having done no act to forfeit the benefit of their allegiance, are "ipso facto" naturalized. Nay, if a man look narrowly into the law in this point, he shall find a consequence that may seem at the first strange, but yet cannot be well avoided; which is, that if divers families of English men and women plant themselves at Middleborough, or at Roan, or at Lisbon, and have issue, and their descendants do intermarry amongst themselves, without any intermixture of foreign blood; such descendants are naturalized to all generations: for every generation is still of liege parents, and therefore naturalized; so as you may have whole tribes and lineages of English in foreign countries.

And therefore it is utterly untrue that the law of England cannot operate or confer naturalization, but only within the bounds of the dominions of England. To come now to their inferences upon statutes; the first is out of this statute which I last recited; in which statute it is said, that in four several places there are these words, "born within the allegiance of England;" or again, "born without the allegiance of England," which, say they, applies the allegiance to the kingdom, and not to the person of the king. To this the answer is easy; for there is no trope of speech more familiar than to use the place of addition for the person. So we say commonly, the line of York, or the line of Lancaster, for the lines of the Duke of York, or the Duke of Lancaster.

So we say the possessions of Somerset, or Warwick, intending the possessions of the Dukes of Somerset or Earls of Warwick. So we see earls sign, Salisbury, Northampton, for the Earls of Salisbury or Northampton. And in the very same manner the statute speaks, allegiance of England, for allegiance of the King of England. Nay, more, if there had been no variety in the penning of that statute, this collection had had a little more force; for those words might have been thought to have been used of purpose and in propriety; but you may find in three other several places of the same statute, allegiance and obeisance of the King of England, and especially in the material and concluding place, that is to say, children whose parents were at the time of their birth at the faith and obeisance of the King of England. So that it is manifest by this indifferent and promiscuous use of both phrases, the one proper, the other improper, that no man can ground any inference upon these words without danger of cavillation.

The second statute out of which they infer, is a statute made in 32 Hen. VIII. touching the policy of strangers tradesmen within this realm. For the parliament finding that they did eat the Englishmen out of trade, and that they entertained no apprentices but of their own nation, did prohibit that they should receive any apprentice but the king's subjects. In which statute is said, that in nine several places there is to be found this context of words, "aliens born out of the king's obedience;" which is pregnant, say they, and doth imply that there be aliens born within the

king's obedience. Touching this inference, I have heard it said, "qui hœret in litere, hœret in cortice;" but this is not worthy the name of "cortex," it is but "muscus corticis," the moss of the bark. For it is evident that the statute meant to speak clearly and without equivocation, and to a common understanding. Now, then, there are aliens in common reputation, and aliens in precise construction of law; the statute then meaning not to comprehend Irishmen, or Jerseymen, or Calaismen, for explanation-sake, lest the word alien might be extended to them in a vulgar acceptance, added those further words, "born out of the king's obedience." Nay, what if we should say, that those words, according to the received laws of speech, are no words of difference or limitation, but of declaration or description of an alien, as if it had been said, with a "videlicet," aliens; that is, such as are born out of the king's obedience? they cannot put us from that construction. But sure I am, if the bark make for them, the pith makes for us; for the privilege of liberty which the statute means to deny to aliens of entertaining apprentices, is denied to none born within the king's obedience, call them aliens or what you will. And, therefore, by their reason, a "post-natus" of Scotland shall by that statute keep what stranger apprentices he will, and so is put in the degree of an English. The third statute out of which inference is made, is the statute of 14 E. III. cap. solo, which hath been said to be our very case; and I am of that opinion too, but directly the other way. Therefore, to open the scope and purpose of that statute: after that the title to the crown of France was devolute to K. E. III., and that he had changed his style, changed his arms, changed his seal, as his majesty hath done, the subjects of England, saith the statute, conceived a fear that the realm of England might become subject to the realm of France, or to the king as king of France. And I will give you the reasons of the double fear, that it should become subject to the realm of France. They had this reason of fear; Normandy had conquered England, Normandy was feudal of France, therefore, because the superior seigniory of France was now united in right with the tenancy of Normandy, and that England, in regard of the conquest, might be taken as a perquisite to Normandy, they had probable reason to fear that the kingdom of England might be drawn to be subject to the realm of France. The other fear, that England might become subject to the king as king of France, grew no doubt of this foresight, that the kings of England might be like to make their mansion and seat of their estate in France, in regard of the climate, wealth, and glory of that kingdom; and thereby the kingdom of England might be governed by the king's mandates and precepts, issuing as from the king of France. But they will say, whatsoever the occasion was, here you have the difference authorised of subjection to a king generally, and subjection to a king as king of a certain kingdom: but to this I give an answer threefold:

First, it presseth not the question; for doth any man say that a "post-natus" of Scotland is naturalized in England, because he is a subject of the king as king of England? No, but generally because he is the king's subject.

Secondly, The scope of this law is to make a distinction between crown and crown; but the scope of their argument is to make a difference between crown and person. Lastly, this statute, as I said, is our very case retorted against them; for this is a direct statute of separation, which presupposeth that the common law had made a union of the crowns in some degree, by virtue of the union of the king's person: if this statute had not been made to stop and cross the course of the common law in that point, as if Scotland now should be suitors to the king, that an act might pass to like effect, and upon like fear. And, therefore, if you will make good your distinction in this present case, show us a statute for that. But I hope you can show no statute of separation between England and Scotland. And if any man say that this was a statute declaratory of the common law, he doth not mark how that is penned; for after a kind of historical declaration in the preamble, that England was never subject to France, the body of the act is penned thus: "The king doth grant and establish:" which are words merely introductive "novæ legis," as if the king gave a charter of franchise, and did invest, by a donative, the subjects of England with a new privilege or exemption, which by the common law they had not.

To come now to the book-cases which they put; which I will couple together, because they receive one joint answer.

The first is 42 E. III. fol., where the book saith, exception was taken that the plaintiff was born in Scotland at Ross, out of the allegiance of England.

The next is 22 H. VI. fol. 38, Adrian's case; where it is pleaded that a woman was born at Bruges, out of allegiance of England.

The third is 13 Eliz. Dyer, fol. 300, where the case begins thus: "Doctor Story qui notorie dignoscitur esse subditus regni Angliæ." In all these three, say they, that is pleaded, that the party is subject of the kingdom of England, and not of the king of England.

To these books I give this answer, that they be not the pleas at large, but the words of the reporter, who speaks compendiously and narratively, and not according to the solemn words of the pleading. If you find a case put, that it is pleaded a man was seised in fee simple, you will not infer upon that, that the words of the plead-

ing were "in feodo simplici," but "sibi et hæredibus suis." But show me some precedent of a pleading at large, of "natus sub ligeantia regni Angliæ;" for whereas Mr. Walter said that pleadings are variable in this point, he would fain bring it to that; but there is no such matter; for the pleadings are constant and uniform in this point: they may vary in the word "fides," or "ligeantia," or "obedientia," and some other circumstances; but in the form of "regni" and "regis" they vary not: neither can there, as I am persuaded, be any one instance showed forth to the contrary. See 9 Eliz. 4 Baggot's Assize, fol. 7, where the pleading at large is entered in the book; there you have "alienigena natus extra ligeantiam domini regis Angliæ." See the precedents in the book of entries, pl. 7, and two other places, for there be no more: and there you shall find still "sub ligeantia domini regis," or "extra legeantiam domini regis." And therefore the forms of pleading, which are things so reverend, and are indeed towards the reasons of the law, as "palma," and "pugnus," containing the reasons of the law, opened or unfolded, or displayed, they make all for us. And for the very words of reporters in books, you must acknowledge and say, "ilicet obruimur numero." For you have 22 Ass. pl. 25. 27 Ass. the prior of Shell's case, pl. 48. 14 H. IV. fol. 19. 3 H. VI. fol. 35. 6 H. VIII. in my Lord Dyer, fol. 2. In all these books the very words of the reporters have "the allegiance of the kings," and not, the allegiance of England. And the book in the 24 Edw. III. which is your best book, although, while it is tossed at the bar, you have sometimes the words "allegiance of England," yet when it comes to Thorp, chief justice, to give the rule, he saith, "we will be certified by the roll, whether Scotland be within the allegiance of the king." Nay, that farther form of pleading beateth down your opinion: that it sufficeth not to say that he is born out of the allegiance of the king, and stay there, but he must show in the affirmative, under the allegiance of what king or state he was born. The reason whereof cannot be, because it may appear whether he be a friend or an enemy, for that in a real action is all one: nor it cannot be because issue shall be taken thereupon; for the issue must arise on the other side upon "indigena" pleaded and traversed. And therefore it can have no other reason but to apprize the court more certainly, that the country of the birth is none of those that are subject to the king. As for the trial, that it should be impossible to be tried, I hold it not worth the answering; for the "venire facias" shall go either where the natural birth is laid, although it be but by fiction, or if it be laid, according to the truth, it shall be tried where the action is brought, otherwise you fall upon a main rock, that breaketh your argument in pieces; for how should the birth of an Irishman be tried, or of a Jerseyman? nay, how should the birth of a subject be tried, that is born of English parents in Spain or Florence, or any part of the world? For to all these the like objection of trial may be made, because they are within no countries: and this receives no answer. And therefore I will now pass on to the second main argument.

It is a rule of the civil law, say they, "Cum duo jura," &c., when two rights do meet in one person, there is no confusion of them, but they remain still in the eye of law distinct, as if they were in several persons: and they bring examples of one man bishop of two sees, or one parson that is rector of two churches. They say this unity in the bishop or the rector doth not create any privity between the parishioners or dioceseners, more than if there were several bishops, or several parsons. This rule I allow, as was said, to be a rule, not of the civil law only, but of common reason, but receiveth no forced or coined, but a true and sound distinction or limitation, which is, that it evermore faileth and deceiveth in cases where there is any vigour or operation of the natural person; for generally in corporations the natural body is but "suffulcimentum tum corporis corporati," it is but as a stock to uphold and bear out the corporate body; but otherwise it is in the case of the crown, as shall be manifestly proved in due place. But to show that this rule receiveth this distinction, I will put but two cases; the statute of 21 H. VIII. ordaineth that a marquis may retain six chaplains qualified, a lord treasurer of England four, a privy counsellor three. The Lord Treasurer Paulet was Marquis of Winchester, lord treasurer of England, and privy counsellor, all at once. The question was, whether he should qualify thirteen chaplains? Now, by the rule "Cum duo jura" he should; but adjudged, he should not. And the reason was, because the attendance of chaplains concerned and respected his natural person; he had but one soul, though he had three offices. The other case which I will put is the case of homage. A man doth homage to his lord for a tenancy held of the manor of Dale; there descendeth unto him afterwards a tenancy held of the manor of Sale, which manor of Sale is likewise in the hands of the same lord. Now, by the rule "Cum duo jura," he should do homage again, two tenancies and two seinories, though but one tenant and one lord, "æquum est ac si set in duobus:" but ruled that he should not do homage again: nay in the case of the king, he shall not pay a second respect of homage, as upon grave and deliberate consideration it was resolved, 24 Hen. VIII. and "usus scaccarii," as there is said, accordingly. And the reason is no other but because when a man is sworn to his lord, he cannot be sworn over again: he hath but one conscience, and the obligation of this oath trencheth between the natural person of

the tenent and the natural person of the lord. And certainly the case of homage and tenure, and of homage liege, which is one case, are things of a near nature, save that the one is much inferior to the other; but it is good to behold these great matters of state in cases of lower element, as the eclipse of the sun is used to be in a pail of water.

The third main argument containeth certain supposed inconveniences, which may ensue of a general naturalization "ipso jure," of which kind three have been specially remembered.

The first is the loss of profit to the king upon letters of denization and purchases of aliens.

The second is the concourse of Scotsmen into this kingdom, to the enfeebling of that realm of Scotland in people, and the impoverishing of this realm of England in wealth.

The third is, that the reason of this case stayeth not within the compass of the present case; for although it were some reason that Scotsmen were naturalized, being people of the same island and language, yet the reason which we urge, which is, that they are subject to the same king, may be applied to persons every way more estranged from us than they are; as if, in future time, in the king's descendants, there should be a match with Spain, and the dominions of Spain should be united with the crown of England, by one reason, say they, all the West Indies should be naturalized; which are people not only "alterius soli," but "alterius cœli."

To these conceits of inconvenience, how easy it is to give answer, and how weak they are in themselves, I think no man that doth attentively ponder them can doubt; for how small revenue can arise of such denizations, and how honourable were it for the king to take escheats of his subjects, as if they were foreigners, for seizure of aliens' lands are in regard the king hath no hold or command of their persons and services, every one may perceive. And for the confluence of Scotsmen, I think, we all conceive the springtide is past at the king's first coming in. And yet we see very few families of them throughout the cities and boroughs of England. And for the naturalizing of the Indies, we can readily help that, when the case comes; for we can make an act of parliament of separation, if we like not their consort. But these being reasons politic, and not legal, and we are not now in parliament, but before a judgment seat, I will not meddle with them, especially since I have one answer which avoids and confounds all their objections in law; which is, that the very selfsame objections do hold in countries purchased by conquest. For in subjects obtained by conquest, it were more profit to indenizate by the poll; in subjects obtained by conquest, they may come in too fast. And if King Henry VII. had accepted the offer of Christopher Columbus, whereby the crown of England had obtained the Indies by conquest or occupation, all the Indies had been naturalized by the confession of the adverse part. And, therefore, since it is confessed, that subjects obtained by conquest are naturalized, and that all these objections are common and indifferent, as well to case of conquest as case of descent, these objections are in themselves destroyed.

And, therefore, to proceed now to overthrow that distinction of descent and conquest. Plato saith well, the strongest of all authorities is, if a man can allege the authority of his adversary against himself: we do urge the confession of the other side, that they confessed the Irish are naturalized; that they confess the subjects of the Isles of Jersey and Guernsey, and Berwick, to be naturalized, and the subjects of Calais and Tournay, when they were English, were naturalized; as you may find in the 5 Eliz. in Dyer, upon the question put to the judges by Sir Nicholas Bacon, lord keeper.

To avoid this, they fly to a difference, which is new coined, that is, (I speak not to the disadvantage of the persons that use it; for they are driven to it "tanquam ad ultimum refugium;" but the difference itself,) it is, I say, full of ignorance and error. And, therefore, to take a view of the supports of the difference, they allege four reasons.

The first is, that countries of conquest, are made parcel of England, because they are acquired by the arms and treasure of England. To this I answer, that it were a very strange argument, that if I wax rich upon the manor of Dale, and upon the revenue thereof purchase a close by it, that it should make that parcel of the manor of Dale. But I will set this new learning on ground with a question or case put. For I oppose them that hold this opinion with this question, If the king should conquer any foreign country by an army compounded of Englishmen and Scotsmen, as it is like, whensoever wars are, so it will be, I demand, Whether this country conquered shall be naturalized both in England and Scotland, because it was purchased by the joint arms of both? and if yea, Whether any man will think it reasonable, that such subjects be naturalized in both kingdoms; the one kingdom not being naturalized toward the other?

These are the intricate consequences of conceits.

A second reason they allege is, that countries won by conquest become subject to the laws of England, which countries patrimonial are not, and that the law doth draw the allegiance, and allegiance naturalization.

But to the major proposition of that argument, touching the dependency of allegiance upon law, somewhat hath been already spoken, and full answer shall be given when we come to it. But in this place it shall suffice to say, that the minor proposition is false; that is, that the laws of Eng-

land are not superinduced upon any country by conquest; but that the old laws remain until the king by his proclamation or letters patent declare other laws; and then if he will he may declare laws which be utterly repugnant, and differing from the laws of England. And hereof many ancient precedents and records may be showed, that the reason why Ireland is subject to the laws of England is not "ipso jure" upon conquest, but grew by a charter of King John; and that extended but to so much as was then in the king's possession; for there are records in the time of King E. I. and II. of divers particular grants to sundry subjects of Ireland and their heirs, that they might use and observe the laws of England.

The third reason is, that there is a politic necessity of intermixture of people in case of subjection by conquest, to remove alienations of mind, and to secure the state; which holdeth not in case of descent. Here I perceive Mr. Walter hath read somewhat in matter of state; and so have I likewise; though we may both quickly lose ourselves in causes of this nature. I find by the best opinions, that there be two means to assure and retain in obedience countries conquered, both very differing, almost in extremes, the one towards the other.

The one is by colonies, and intermixture of people, and transplantation of families, which Mr. Walter spoke of; and it was indeed the Roman manner: but this is like an old relic, much reverenced and almost never used. But the other, which is the modern manner, and almost wholly in practice and use, is by garrisons and citadels, and lists or companies of men of war, and other like matters of terror and bridle.

To the first of these, which is little used, it is true that naturalization doth conduce, but to the latter it is utterly opposite, as putting too great pride and means to do hurt in those that are meant to be kept short and low. And yet in the very first case, of the Roman proceeding, naturalization did never follow by conquest, during all the growth of the Roman empire; but was ever conferred by charters, or donations, sometimes to cities and towns, sometimes to particular persons, and sometimes to nations, until the time of Adrian the emperor, and the law "In orbe Romano;" and that law or constitution is not referred to title of conquest and arms only, but to all other titles; as by the donation and testament of kings, by submission and dedition of states, or the like: so as this difference was as strange to them as to us. And certainly I suppose it will sound strangely, in the hearing of foreign nations, that the law of England should "ipso facto" naturalize subjects of conquests, and shall not naturalize subjects which grow unto the king by descent; that is, that it should confer the benefit and privilege of naturalization upon such as cannot at the first but bear hatred and rancour to the state of England, and have had their hands in the blood of the subjects of England, and should deny the like benefit to those that are conjoined with them by a more amiable mean; and that the law of England should confer naturalization upon slaves and vassals, for people conquered are no better in the beginning, and should deny it to freemen: I say, it will be marvelled at abroad, of what complexion the laws of England be made, that breedeth such differences. But there is little danger of such scandals; for this is a difference that the law of England never knew.

The fourth reason of this difference is, that in case of conquest the territory united can never be separated again. But in case of descent, there is a possibility; if his majesty's line should fail, the kingdoms may sever again to their respective heirs; as in the case of 8 Hen. VI., where it is said, that if land descend to a man from the ancestor on the part of his father, and a rent issuing out of it from an ancestor on the part of the mother; if the party die without issue, the rent is revived. As to this reason, I know well the continuance of the king's line is no less dear to those that allege the reason, than to us that confute it. So as I do not blame the passing of the reason: but it is answered with no great difficulty; for, first, the law doth never respect remote and foreign possibilities; as notably appeared in the great case between Sir Hugh Cholmley and Houlford in the exchequer, where one in the remainder, to the end to bridle tenant in tail from suffering a common recovery, granted his remainder to the king; and because he would be sure to have it out again without charge or trouble when his turn was served, he limited it to the king during the life of tenant in tail. Question grew, whether this grant of remainder were good, yea or no. And it was said to be frivolous and void, because it could never by any possibility execute; for tenant in tail cannot surrender; and if he died, the remainder likewise ceased. To which it was answered, that there was a possibility that it might execute, which was thus: Put case, that tenant in tail should enter into religion, having no issue: then the remainder should execute, and the kings should hold the land during the natural life of tenant in tail, notwithstanding his civil death. But the court "una voce" exploded this reason, and said, that monasteries were down, and entries into religion gone, and they must be up again ere this could be; and that the law did not respect such remote and foreign possibilities. And so we may hold this for the like: for I think we all hope that neither of those days shall ever come, either for monasteries to be restored, or for the king's line to fail But the true answer is, that the possibility subse-

quent, remote or not remote, doth not alter the operation of law for the present. For that should be, as if in case of the rent which you put, you should say, that in regard that the rent may be severed, it should be said to be "in esse" in the mean time, and should be grantable; which is clearly otherwise. And so in the principal case, if that should be, which God of his goodness forbid, "cessante causa cessat effectus," the benefit of naturalization for the time to come is dissolved. But that altereth not the operation of the law; "rebus sic stantibus." And therefore I conclude that this difference is but a device full of weakness and ignorance; and that there is one and the same reason of naturalizing subjects by descent, and subjects by conquest; and that is the union in the person of the king; and therefore that the case of Scotland is as clear as that of Ireland, and they that grant the one cannot deny the other. And so I conclude the second part, touching confutation.

To proceed therefore to the proofs of our part, your lordships cannot but know many of them must be already spent in the answer which we have made to the objection. For "corruptio unius, generatio alterius," holds as well in arguments, as in nature, the destruction of an objection begets a proof. But nevertheless I will avoid all iteration, lest I should seem either to distract your memories, or to abuse your patience; but will hold myself only to these proofs which stand substantially of themselves, and are not intermixed with matter of confutation. I will therefore prove unto your lordships that the post-natus of Scotland is by the law of England natural, and ought so to be adjudged, by three courses of proof.

1. First, upon point of favour of law.

2. Secondly, upon reason and authorities of law.

3. And, lastly, upon former precedents and examples.

1. Favour of law: what mean I by that? The law is equal and favoureth not. It is true not persons but things or matters it doth favour. Is it not a common principle, that the law favoureth three things, life, liberty, and dower? And what is the reason of this favour? This, because our law is grounded upon the law of nature. And these three things do flow from the law of nature, preservation of life natural; liberty, which every beast or bird seeketh and affecteth naturally; the society of man and wife, whereof dower is the reward natural. It is well, doth the law favour liberty so highly, as a man shall enfranchise his bondman when he thinketh not of it, by granting to him lands or goods; and is the reason of it "quia natura omnes homines erant liberi;" and that servitude or villenage doth cross and abridge the law of nature? And doth not the selfsame reason hold in the present case? For, my lords, by the law of nature all men in the world are naturalized one towards another; they were all made of one lump of earth, of one breath of God; they had the same common parents: nay, at the first they were, as the Scripture showeth, "unius labii," of one language, until the curse; which curse, thanks be to God, our present case is exempted from. It was civil and national laws that brought in these words, and differences, of "civis" and "exterus," alien and native. And therefore because they tend to abridge the law of nature, the law favoureth not them, but takes them strictly; even as our law hath an excellent rule, That customs of towns and boroughs shall be taken and constructed strictly and precisely, because they do abridge and derogate from the law of the land. So, by the same reason, all national laws whatsoever are to be taken strictly and hardly in any point wherein they abridge and derogate from the law of nature. Whereupon I conclude that your lordships cannot judge the law for the other side, except the case be "luce clarius." And if it appear to you but doubtful, as I think no man in his right senses but will yield it to be at least doubtful, then ought your lordships, under your correction be it spoken, to pronounce for us because of the favour of the law. Furthermore, as the law of England must favour naturalization as a branch of the law of nature, so it appears manifestly, that it doth favour it accordingly. For is it not much to make a subject naturalized? By the law of England, it should suffice, either place or parents, if he be born in England, it is no matter though his parents be Spaniards, or what you will. On the other side, if he be born of English parents, it skilleth not though he be born in Spain, or in any other place of the world. In such sort doth the law of England open her lap to receive in people to be naturalized; which indeed showeth the wisdom and excellent composition of our law, and that it is the law of a warlike and magnanimous nation, fit for empire. For look, and you shall find that such kind of estates have been ever liberal in point of naturalization; whereas merchant-like and envious estates have been otherwise.

For the reasons of law joined with authorities, I do first observe to your lordships, that our assertion or affirmation is simple and plain: that it sufficeth to naturalization, that there be one king, and that the party be "natus ad fidem regis," agreeable to the definition of Littleton, which is: Alien is he which is born out of the allegiance of our lord the king. They of the other side speak of respects, and "quoad," and "quatenus," and such subtilties and distinctions. To maintain therefore our assertion, I will use three kinds of proof.

The first is, that allegiance cannot be applied to the law or kingdom, but to the person of the king, because the allegiance of the subject is more large and spacious, and hath a greater latitude and comprehension than the law or the

kingdom. And therefore it cannot be a dependency of that without the which it may of itself subsist.

The second proof which I will use is, that the natural body of the king hath an operation and influence upon his body politic, as well as his body politic hath upon his body natural; and therefore that although his body politic of King of England, and his body politic of King of Scotland, be several and distinct, yet nevertheless his natural person, which is one, hath an operation upon both, and createth a privity between them.

And the third proof is the binding text of five several statutes.

For the first of these, I shall make it manifest, that the allegiance is of a greater extent and dimension than laws or kingdom, and cannot consist by the laws merely; because it began before laws, it continueth after laws, and it is in vigour where laws are suspended and have not their force. That it is more ancient than law, appeareth by that which was spoken in the beginning by way of inducement, where I did endeavour to demonstrate, that the original age of kingdoms was governed by natural equity, that kings were more ancient than lawgivers, that the first submissions were simple, and upon confidence to the person of kings, and that the allegiance of subjects to hereditary monarchies can no more be said to consist by laws, than the obedience of children to parents.

That allegiance continueth after laws, I will only put the case, which was remembered by two great judges in a great assembly, the one of them now with God: which was, that if a king of England should be expulsed his kingdom, and some particular subjects should follow him in flight or exile in foreign parts, and any of them there should conspire his death; that upon his recovery of his kingdom, such a subject might by the law of England be proceeded with for treason committed and perpetrated at what time he had no kingdom, and in place where the law did not bind.

That allegiance is in vigour and force where the power of law hath a cessation, appeareth notably in time of wars, for "silent leges inter arma." And yet the sovereignty and imperial power of the king is so far from being then extinguished or suspended, as contrariwise it is raised and made more absolute; for then he may proceed by his supreme authority, and martial law, without observing formalities of the laws of his kingdom. And, therefore, whosoever speaketh of laws, and the king's power by laws, and the subjects' obedience or allegiance to laws, speak but of one-half of the crown. For Bracton, out of Justinian, doth truly define the crown to consist of laws and arms, power civil and martial, with the latter whereof the law doth not intermeddle: so as where it is much spoken, that the subjects of England are under one law, and the subjects of Scotland are under another law, it is true at Edinburgh or Stirling, or, again, in London or York; but if Englishmen and Scotsmen meet in an army royal before Calais, I hope then they are under one law. So, likewise, not only in time of war, but in time of peregrination: If a king of England travel or pass through foreign territories, yet the allegiance of his subjects followeth him: as appeareth in that notable case which is reported in Fleta, where one of the train of King Edward I., as he passed through France from the holy land, embezzled some silver plate at Paris, and jurisdiction was demanded of this crime by the French king's counsel at law, "ratione soli," and demanded likewise by the officers of King Edward, "ratione personæ;" and after much solemnity, contestation, and interpleading, it was ruled and determined for King Edward, and the party tried and judged before the knight marshal of the king's house, and hanged after the English law, and execution in St. Germain's meadows. And so much for my first proof.

For my second main proof, that is drawn from the true and legal distinction of the king's several capacities; for they that maintain the contrary opinion do in effect destroy the whole force of the king's natural capacity, as if it were drowned and swallowed up by his politic. And therefore I will first prove to your lordships, that his two capacities are in no sort confounded. And, secondly, that as his capacity politic worketh so upon his natural person, as it makes it differ from all other the natural persons of his subjects: so "e converso," his natural body worketh so upon his politic, as the corporation of the crown utterly differeth from all other corporations within the realm.

For the first, I will vouch you the very words which I find in that notable case of the duchy, where the question was, whether the grants of King Edward VI. for duchy lands should be avoided in points of nonage? The case, as your lordships know well, is reported by Mr. Plowden as the general resolution of all the judges of England, and the king's learned counsel, Rouswell the solicitor only excepted; there I find the said words, Comment. fol. 215. "There is in the king not a body natural alone, nor a body politic alone, but a body natural and politic together: corpus corporatum in corpore naturali, et corpus naturale in corpore corporato." The like I find in the great case of the Lord Berkley, set down by the same reporter, Comment. fol. 234. "Though there be in the king two bodies, and that those two bodies are conjoined, yet are they by no means confounded the one by the other."

Now, then, to see the mutual and reciprocal intercourse, as I may term it, or influence or communication of qualities, that these bodies have the one upon the other. the body politic of the

crown induceth the natural person of the king with these perfections: That the king in law shall never be said to be within age: that his blood shall never be corrupted: and that if he were attainted before, the very assumption of the crown purgeth it. That the king shall not take but by matter of record, although he take in his natural capacity as upon a gift in tail. That his body in law shall be said to be as it were immortal; for there is no death of the king in law, but a demise, as it is termed: with many other the like privileges and differences from other natural persons, too long to rehearse, the rather because the question laboureth not in that part. But, on the contrary part, let us see what operations the king's natural person hath upon his crown and body politic; of which the chiefest and greatest is, that it causeth the crown to go by descent, which is a thing strange and contrary to the course of all corporations, which evermore take in succession and not by descent; for no man can show me in all the corporations of England, of what nature soever, whether they consist of one person or of many; or whether they be temporal or ecclesiastical, any one takes to him and his heirs, but all to him and his successors. And, therefore, here you may see what a weak course that is, to put cases of bishops and parsons, and the like, and to apply them to the crown. For the king takes to him and his heirs in the manner of a natural body, and the word, successors, is but superfluous: and where that is used, that is ever duly placed after the word heirs, "the king, his heirs, and successors."

Again, no man can deny but "uxor et filius sunt nomina naturæ." A corporation can have no wife, nor a corporation can have no son: how is it then that it is treason to compass the death of the queen or of the prince? There is no part of the body politic of the crown in either of them, but it is entirely in the king. So likewise we find in the case of the Lord Berkley, the question was, whether the statute of 35 Henry VIII. for that part which concerned Queen Catharine Par's jointure, were a public act or no, of which the judges ought to take notice, not being pleaded; and judged a public act. So the like question came before your lordship, my lord chancellor, in Serjeant Heale's case: whether the statute of 11 Edward III., concerning the entailing of the dukedom of Cornwall to the prince, were a public act or no; and ruled likewise a public act. Why? no man can affirm but these be operations of law, proceeding from the dignity of the natural person of the king; for you shall never find that another corporation whatsoever of a bishop, or master of a college, or mayor of London, worketh any thing in law upon the wife or son of the bishop or the mayor. And to conclude this point, and withal to come near to the case in question. I will show you where the natural person of the king hath not only an operation in the case of his wife and children, but likewise in the case of his subjects, which is the very question in hand. As for example, I put this case: Can a Scotsman, who is a subject to the natural person of the king, and not to the crown of England; can a Scotsman, I say, be an enemy by the law to the subjects of England? Or must he not of necessity, if he should invade England, be a rebel and no enemy, not only as to the king, but as to the subject? Or can any letters of mart or reprisal be granted against a Scotsman that shall spoil an Englishman's goods at sea? And certainly this case doth press exceeding near the principal case; for it proveth plainly, that the natural person of the king hath such a communication of qualities with his body politic, as it makes the subjects of either kingdom stand in another degree of privity one towards the other, than they did before. And so much for the second proof.

For the five acts of parliament which I spoke of, which are concluding to this question,

The first of them is that concerning the banishment of Hugh Spencer, in the time of King Edward II., in which act there is contained the charge and accusation whereupon his exile proceeded. One article of which charge is set down in these words: "Homage and oath of the subject is more by reason of the crown than by reason of the person of the king; so that if the king doth not guide himself by reason in right of the crown, his lieges are bound by their oath to the crown to remove the king."

By which act doth plainly appear the perilous consequence of this distinction concerning the person of the king and the crown. And yet I do acknowledge justly and ingeniously a great difference between that assertion and this, which is now maintained: for it is one thing to make things distinct, another thing to make them separable, "aliud est distinctio, aliud separatio;" and therefore I assure myself, that those that now use and urge that distinction, do as firmly hold, that the subjection to the king's person and to the crown are inseparable, though distinct, as I do. And it is true that the poison of the opinion and assertion of Spencer is like the poison of a scorpion, more in the tail than in the body; for it is the inference that they make, which is, that the king may be deposed or removed, that is the treason and disloyalty of that opinion. But, by your leave, the body is never a whit the more wholesome meat for having such a tail belonging to it: therefore we see that is "locus lubricus," an opinion from which a man may easily slide into an absurdity. But upon this act of parliament I will only note one circumstance more, and so leave it, which may add authority unto it in the opinion of the wisest; and that is, that these Spencers were not ancient nobles or great patriots, that were charged and prosecuted by upstarts and favourites: for then it

might be said, that it was but the action of some flatterers, who used to extol the power of monarchs to be infinite: but it was contrary; a prosecution of those persons being favourites by the nobility; so as the nobility themselves, which seldom do subscribe to the opinion of an infinite power of monarchs, yet even they could not endure, but their blood did rise to hear that opinion, that subjection is owing to the crown rather than to the person of the king.

The second act of parliament which determined this case, is the act of recognition in the first year of his majesty, wherein you shall find, that in two several places, the one in the preamble, the other in the body of the act, the parliament doth recognise that these two realms of England and Scotland are under one imperial crown. The parliament doth not say under one monarchy or king, which might refer to the person, but under one imperial crown, which cannot be applied but to the sovereign power of regiment, comprehending both kingdoms. And the third act of parliament is the act made in the fourth year of his majesty's reign, for the abolition of hostile laws: wherein your lordships shall find likewise in two places, that the parliament doth acknowledge, that there is a union of these two kingdoms already begun in his majesty's person: so as, by the declaration of that act, they have not only one king, but there is a union in inception in the kingdoms themselves.

These two are judgments in parliament by way of declaration of law, against which no man can speak. And certainly these are righteous and true judgments, to be relied upon: not only for the authority of them, but for the verity of them; for to any that shall well and deeply weigh the effects of law upon this conjunction, it cannot but appear, that although "partes integrales" of the kingdom, as the philosophers speak, such as the laws, the officers, the parliament, are not yet commixed; yet, nevertheless, there is but one and the selfsame fountain of sovereign power depending upon the ancient submission, whereof I spake in the beginning; and in that sense the crowns and the kingdoms are truly said to be united.

And the force of this truth is such, that a grave and learned gentleman, that defended the contrary opinion, did confess thus far: That in ancient times, when monarchies, as he said, were but heaps of people, without any exact form of policy; that then naturalization and communication of privileges did follow the person of the monarch; but otherwise, since states were reduced to a more exact form: so as thus far we did consent; but still I differ from him in this, that these more exact forms, wrought by time, and custom, and laws, are nevertheless still upon the first foundation, and do serve only to perfect and corroborate the force and bond of the first submission, and in no sort to disannul or destroy it.

And, therefore, with these two acts do I likewise couple the act of 14 Edward III., which hath been alleged of the other side. For, by collating of that act with this former two, the truth of that we affirm will the more evidently appear, according unto the rule of reason: "opposita juxta se posita magis elucesunt." That act of 14 is an act of separation. These two acts formerly recited are acts tending to union. This act is an act that maketh a new law; it is by the words of grant and establish. These two acts declare the common law as it is, being by words of recognition and confession.

And, therefore, upon the difference of these laws you may substantially ground this position: That the common law of England, upon the adjunction of any kingdom unto the King of England, doth make some degree of union in the crowns and kingdoms themselves; except by a special act of parliament they be dissevered.

Lastly, the fifth act of parliament which I promised, is the act made in the 42 of E. III. cap. 10, which is an express decision of the point in question. The words are, "Item, (upon the petition put into parliament by the commons,) that infants born beyond the seas in the seigniories of Calais, and elsewhere within the lands and seigniories that pertain to our sovereign lord the king beyond the seas, be as able and inheritable for their heritage in England, as other infants born within the realm of England, it is accorded that the common law and the statute formerly made be holden."

Upon this act I infer thus much; first, that such as the petition mentioneth were naturalized, the practice shows: then, if so, it must be either by common law or statute, for so the words report: not by statute, for there is no other statute but 25 E. III., and that extends to the case of birth out of the king's obedience, where the parents are English: "ergo" it was by the common law, for that only remains. And so by the declaration of this statute at the common law, "all infants, born within the lands and seigniories (for I give you the very words again) that pertain to our sovereign lord the king, (it is not said, as are the dominions of England,) are as able and inheritable of their heritage in England, as other infants born within the realm of England." What can be more plain? And so I leave statutes and go to precedents; for though the one do bind more, yet the other sometimes doth satisfy more.

For precedents; in the producing and using of that kind of proof, of all others it behooveth them to be faithfully vouched; for the suppressing or keeping back of a circumstance, may change the case: and therefore I am determined to urge only such precedents, as are without all colour or scruple of exception or objection, even of those objections which I have, to my thinking, fully answered and confuted. This is now, by the

providence of God, the fourth time that the line and Kings of England have had dominions and seigniories united unto them as patrimonies, and by descent of blood; four unions, I say, there have been inclusive with this last. The first was of Normandy, in the person of William, commonly called the Conqueror. The second was of Gascoigne, and Guienne, and Anjou, in the person of King Henry II.; in his person, I say, though by several titles. The third was of the crown of France, in the person of King Edward III. And the fourth of the kingdom of Scotland, in his majesty. Of these I will set aside such as by any cavillation can be excepted unto. First, I will set aside Normandy, because it will be said, that the difference of countries accruing by conquest, from countries annexed by descent, in matter of communication of privileges, holdeth both ways, as well of the part of the conquering kingdom, as the conquered; and, therefore, that although Normandy was not a conquest of England, yet England was a conquest of Normandy, and so a communication of privileges between them. Again, set aside France, for that it will be said that although the king had a title in blood and by descent, yet that title was executed and recovered by arms, so as it is a mixed title of conquest and descent, and therefore the precedent not so clear.

There remains then Gascoigne and Anjou, and that precedent likewise I will reduce and abridge to a time, to avoid all question. For it will be said of them also, that after they were lost and recovered "in ore gladii," that the ancient title of blood was extinct; and that the king was in upon his new title by conquest; and Mr. Walter hath found a book case in 13 H. VI. abridged by Mr. Fitz-Herbert, in title of "Protection, placito" 56, where a protection was cast, "quia profecturus in Gasconiam" with the Earl of Huntingdon, and challenged because it was not a voyage royal; and the justices thereupon required the sight of the commission, which was brought before them, and purported power to pardon felonies and treason, power to coin money, and power to conquer them that resist: whereby Mr. Walter, finding the word conquest, collected that the king's title at that time was reputed to be by conquest; wherein I may not omit to give "obiter" that answer, which law and truth provide, namely, that when any king obtaineth by war a country whereunto he hath right by birth, that he is ever in upon his ancient right, not upon his purchase by conquest; and the reason is, that there is as well a judgment and recovery by war and arms, as by law and course of justice. For war is a tribunal-seat, wherein God giveth the judgment, and the trial is by battle, or duel, as in the case of trial of private right: and then it follows, that whosoever cometh in by eviction, comes in his "remitter:" so as there will be no difference in countries whereof the right cometh by descent, whether the possession be obtained peaceably or by war. But yet, nevertheless, because I will utterly take away all manner of evasion and subterfuge, I will yet set apart that part of time, in and during the which the subjects of Gascoigne and Guienne might be thought to be subdued by a reconquest. And therefore I will not meddle with the Prior of Shelley's case, though it be an excellent case; because it was in the time of 27 E. III.; neither will I meddle with any cases, records, or precedents, in the time of King H. V. or King H. VI., for the same reason; but will hold myself to a portion of time from the first uniting of these provinces in the time of King H. II. until the time of King John, at what time those provinces were lost; and from that time again unto the seventeenth year of the reign of King E. II., at what time the statute of "prærogativa regis" was made, which altered the law in the point in hand.

That both in these times the subjects of Gascoigne, and Guienne, and Anjou, were naturalized for inheritance in England, by the laws of England, I shall manifestly prove; and the proof proceeds, as to the former time, which is our case, in a very high degree "a minore ad majus," and as we say, "a multo fortiori." For if this privilege of naturalization remained unto them when the countries were lost, and became subjects in possession to another king, much more did they enjoy it as long as they continued under the king's subjection.

Therefore to open the state of this point. After these provinces were, through the perturbations of the state in the unfortunate time of King John, lost and severed, the principal persons which did adhere unto the French, were attainted of treason, and their escheats here in England taken and seized. But the people, that could not resist the tempest when their heads and leaders were revolted, continued inheritable to their possessions in England; and reciprocally the people of England inherited and succeeded to their possessions in Gascoigne, and were both accounted "ad fidem utriusque regis," until the statute of "prærogativa regis;" wherein the wisdom and justice of the law of England is highly to be commended. For of this law there are two grounds of reason, the one of equity, the other of policy; that of equity was, because the common people were in no fault, but, as the Scripture saith, in a like case, "quid fecerunt oves istæ?" It was the cowardice and disloyalty of their governors that deserved punishment, but what hath these sheep done? And therefore to have punished them, and deprived them of their lands and fortunes, had been unjust. That of policy was, because if the law had forthwith, upon the loss of the countries by an accident of time, pronounced the people for aliens, it had been a kind of accession of their right, and a disclaimer in them, and so a greater

difficulty to recover them. And therefore we see the statute which altered the law in this point, was made in the time of a weak king, that, as it seemed, despaired ever to recover his right, and therefore thought better to have a little present profit by escheats, than the continuance of his claim, and the countenance of his right, by the admitting of them to enjoy their inheritance as they did before.

The state therefore of this point being thus opened, it resteth to prove our assertion; that they were naturalized; for the clearing whereof I shall need but to read the authorities, they be so direct and pregnant. The first is the very text of the statute of "prærogativa regis. Rex habebit escætas de terris Normannorum, cujuscunque feodi fuerint, salvo servitio, quod pertinet ad capitales dominos feodi illius: et hoc similiter intelligendum est, si aliqua hæreditas descendat alicui nato in partibus transmarinis, et cujus antecessores fuerunt ad fidem regis Franciæ, ut tempore regis Johannis, et non ad fidem regis Angliæ, sicut contigit de baronia Monumetæ," &c.

By which statute it appears plainly, that before the time of King John there was no colour of any escheat, because they were the king's subjects in possession, as Scotland now is; but only determines the law from that time forward.

This statute, if it had in it any obscurity, it is taken away by two lights, the one placed before it; and the other placed after it; both authors of great credit, the one for ancient, the other for late times: the former is Bracton, in his cap. "De exceptionibus," lib. 5, fol. 427, and his words are these: "Est etiam et alia exceptio quæ tenenti competit ex persona petentis, propter defectum nationis, quæ dilatoria est, et non perimit actionem, ut si quis alienigena qui fuerit ad fidem regis Franciæ, et actionem instituat versus aliquem, qui fuerit ad fidem regis Angliæ, tali non respondeatur, saltem donec terræ fuerint communes."

By these words it appeareth, that after the loss of the provinces beyond the seas, the naturalization of the subjects of those provinces was in no sort extinguished, but only was in suspense during the time of war, and no longer; for he saith plainly, that the exception, which we call plea, to the person of an alien, was not peremptory, but only dilatory, that is to say, during the time of war, and until there were peace concluded, which he terms by these words, "donec terræ fuerint communes:" which, though the phrase seem somewhat obscure, is expounded by Bracton himself in his fourth book, fol. 297, to be of peace made and concluded, whereby the inhabitants of England and those provinces might enjoy the profits and fruits of their lands in either place "communiter," that is, respectively, or as well the one as the other: so as it is clear they were no aliens in right, but only interrupted and debarred of suits in the king's courts in time of war.

The authority after the statute is that of Mr. Stamford, the best expositor of a statute that hath been in our law; a man of reverend judgment and excellent order in his writings; his words are in his exposition upon the branch of the statute which we read before. "By this branch it should appear, that at this time men of Normandy, Gascoigne, Guienne, Anjou, and Britain, were inheritable within this realm, as well as Englishmen, because that they were sometimes subjects to the kings of England, and under their dominion, until King John's time, as is aforesaid: and yet after his time, those men, saving such whose lands were taken away for treason, were still inheritable within this realm till the making of this statute; and in the time of peace between the two kings of England and France, they were answerable within this realm, if they had brought any action for their lands and tenements."

So as by these three authorities, every one so plainly pursuing the other, we conclude that the subjects of Gascoigne, Guienne, Anjou, and the rest, from their first union by descent, until the making of the statute of "prærogativa regis," were inheritable in England, and to be answered in the king's courts in all actions, except it were in time of war. Nay, more, which is "de abundanti," that when the provinces were lost, and disannexed, and that the king was but king "de jure" over them, and not "de facto;" yet, nevertheless, the privilege of naturalization continued.

There resteth yet one objection, rather plausible to a popular understanding than any ways forcible in law or learning, which is a difference taken between the kingdom of Scotland and these duchies, for that the one is a kingdom, and the other was not so; and therefore that those provinces being of an inferior nature, did acknowledge our laws, and seals, and parliament, which the kingdom of Scotland doth not.

This difference was well given over by Mr. Walter; for it is plain that a kingdom and absolute dukedom, or any other sovereign estate do differ "honore," and not "potestate:" for divers duchies and countries that are now, were sometimes kingdoms: and divers kingdoms that are now, were sometimes duchies, or of other inferior style: wherein we need not travel abroad, since we have in our own state so notorious an instance of the country of Ireland, whereof King H. VIII. of late time, was the first that writ himself king, the former style being lord of Ireland, and no more; and yet kings had the same authority before, that they have had since, and the same nation the same marks of a sovereign state, as their parliament, their arms, their coins, as they now have: so as this is too superficial an allegation to labour upon.

And if any do conceive that Gascoigne and Giuenne were governed by the laws of England: First that cannot be in reason; for it is a true ground, That wheresoever any prince's title unto

any country is by law, he can never change the laws, for that they create his title; and, therefore, no doubt those duchies retained their own laws; which if they did, then they could not be subject to the laws of England. And next, again, the fact or practice was otherwise, as appeareth by all consent of story and record: for those duchies continued governed by the civil law, their trials by witnesses, and not by jury, their lands testamentary, and the like.

Now, for the colours that some have endeavoured to give, that they should have been subordinate to the government of England; they were partly weak, and partly such as make strongly against them: for as to that, that writs of "habeas corpus" under the great seal of England have gone to Gascoigne, it is no manner of proof; for that the king's writs, which are mandatory, and not writs of ordinary justice, may go to his subjects into any foreign parts whatsoever, and under what seal it pleaseth him to use. And as to that, that some acts of parliament have been cited, wherein the parliaments of England have taken upon them to order matters of Gascoigne: if those statutes be well looked into, nothing doth more plainly convince the contrary, for they intermeddle with nothing but that that concerneth either the English subjects personally, or the territories of England locally, and never the subjects of Gascoigne: for look upon the statute of 27 E. III. cap. 5; there it is said, that there shall be no forestalling of wines. But by whom? Only by English merchants; not a word of the subjects of Gascoigne, and yet no doubt they might be offenders in the same kind.

So in the sixth chapter it is said, that all merchants Gascoignes may safely bring wines into what part it shall please them: here now are the persons of Gascoignes; but then the place whither? Into the realm of England. And in the seventh chapter, that erects the ports of Bourdeaux and Bayonne for the staple towns of wine; the statute ordains, "that if any," but who? "English merchant, or his servants, shall buy or bargain otherwhere, his body shall be arrested by the steward of Gascoigne, or the constable of Bourdeaux:" true, for the officers of England could not catch him in Gascoigne; but what shall become of him? shall he be proceeded with within Gascoigne? No, but he shall be sent over into England into the Tower of London.

And this doth notably disclose the reason of that custom which some have sought to wrest the other way: that custom, I say, whereof a form doth yet remain, that in every parliament the king doth appoint certain committees in the Upper House to receive the petitions of Normandy, Guienne, and the rest; which, as by the former statute doth appear, could not be for the ordering of the governments there, but for the liberties and good usage of the subjects of those parts when they came hither, or "vice versa," for the restraining of the abuses and misdemeanours of our subjects when they went thither.

Wherefore I am now at an end. For us to speak of the mischiefs, I hold it not fit for this place, lest we should seem to bend the laws to policy, and not to take them in their true and natural sense. It is enough that every man knows, that it is true of these two kingdoms, which a good father said of the churches of Christ: "si inseparabiles insuperabiles." Some things I may have forgot, and some things, perhaps, I may forget willingly; for I will not press any opinion or declaration of late time which may prejudice the liberty of this debate; but "ex dictis, et ex non dictis," upon the whole matter I pray judgment for the plaintiff.

TRACTS RELATING TO IRELAND.

CERTAIN CONSIDERATIONS

TOUCHING

THE PLANTATION IN IRELAND.

PRESENTED TO HIS MAJESTY, 1606.

TO THE KING.

It seemeth God hath reserved to your majesty's times two works, which amongst the works of kings have the supreme pre-eminence; the union, and the plantation of kingdoms. For although it be a great fortune for a king to deliver or recover his kingdom from long continued calamities: yet, in the judgment of those that have distinguished of the degrees of sovereign honour, to be a founder of estates or kingdoms, excelleth all the rest. For, as in arts and sciences, to be the first inventor is more than to illustrate or amplify: and as in the works of God, the creation is greater than the preservation; and as in the works of nature, the birth and nativity is more than the continuance: so in kingdoms, the first foundation or plantation is of more noble dignity and merit than all that followeth. Of which foundations there being but two kinds; the first, that maketh one of more; and the second, that maketh one of none: the latter resembling the creation of the world, which way "de nihilo ad quid:" and the former, the edification of the church, which was "de multiplici ad simplex, vel ad unum:" it hath pleased the divine providence, in singular favour to your majesty, to put both these kinds of foundations or regenerations into your hand: the one, in the union of the island of Britain; the other, in the plantation of great and noble parts of the island of Ireland. Which enterprises being once happily accomplished, then that which was uttered by one of the best orators, in one of the worst verses, "O fortunatam natam me consule Romam!" may be far more truly and properly applied to your majesty's acts; "natam te rege Britanniam; natam Hiberniam." For he spake improperly of deliverance and preservation; but in these acts of yours it may be verified more naturally. For indeed unions and plantations are the very nativities of birth-days of kingdoms; wherein likewise your majesty hath yet a fortune extraordinary, and differing from former examples in the same kind. For most part of unions and plantations of kingdoms have been founded in the effusion of blood: but your majesty shall build "in solo puro, et in area pura," that shall need no sacrifices expiatory for blood; and therefore, no doubt, under a higher and more assured blessing. Wherefore, as I adventured, when I was less known and less particularly bound to your majesty, than since by your undeserved favour I have been, to write somewhat touching the union, which your majesty was pleased graciously to accept, and which since I have to my power seconded by my travails, not only in discourse, but in action: so I am thereby encouraged to do the like, touching this matter of plantation; hoping that your majesty will, through the weakness of my ability, discern the strength of my affection, and the honest and fervent desire I have to see your majesty's person, name, and times, blessed and exalted above those of your royal progenitors. And I was the rather invited this to do, by the remembrance, that when the lord chief justice deceased, Popham, served in the place wherein I now serve, and afterwards in the attorney's place; he laboured greatly in the last project, touching the plantation of Munster: which, nevertheless, as it seemeth, hath given more light by the errors thereof, what to avoid, than by the direction of the same, what to follow.

First, therefore, I will speak somewhat of the excellency of the work, and then of the means to compass and effect it.

For the excellency of the work, I will divide it into four noble and worthy consequences that will follow thereupon.

The first of the four, is honour; whereof I have spoken enough already, were it not that the harp

of Ireland puts me in mind of that glorious emblem or allegory, wherein the wisdom of antiquity did figure and shadow out works of this nature. For the poets feigned that Orpheus, by the virtue and sweetness of his harp, did call and assemble the beasts and birds, of their natures wild and savage, to stand about him, as in a theatre; forgetting their affections of fierceness, of lust, and of prey; and listening to the tunes and harmonies of the harp; and soon after called likewise the stones and woods to remove, and stand in order about him: which fable was anciently interpreted of the reducing and plantation of kingdoms; when people of barbarous manners are brought to give over and discontinue their customs of revenge and blood, and of dissolute life, and of theft, and of rapine; and to give ear to the wisdom of laws and governments; whereupon immediately followeth the calling of stones for building and habitation; and of trees for the seats of houses, orchards, enclosures, and the like. This work, therefore, of all other most memorable and honourable, your majesty hath now in hand; especially, if your majesty join the harp of David, in casting out the evil spirit of superstition, with the harp of Orpheus, in casting out desolation and barbarism.

The second consequence of this enterprise is, the avoiding of an inconvenience, which commonly attendeth upon happy times, and is an evil effect of a good cause. The revolution of this present age seemeth to incline to peace, almost generally in these parts; and your majesty's most Christian and virtuous affections do promise the same more especially to these your kingdoms. An effect of peace in fruitful kingdoms, where the stock of people, receiving no consumption nor diminution by war, doth continually multiply and increase, must in the end be a surcharge or overflow of people, more than the territories can well maintain; which many times insinuating a general necessity and want of means into all estates, doth turn external peace into internal troubles and seditions. Now what an excellent diversion of this inconvenience is ministered, by God's providence, to your majesty, in this plantation of Ireland; wherein so many families may receive sustentation and fortunes; and the discharge of them also out of England and Scotland may prevent many seeds of future perturbations: so that it is, as if a man were troubled for the avoidance of water from the place where he hath built his house, and afterwards should advise with himself to cast those waters, and to turn them into fair pools or streams, for pleasure, provision, or use. So shall your majesty in this work have a double commodity, in the avoidance of people here, and in making use of them there.

The third consequence is the great safety that is like to grow to your majesty's estate in general by this act: in discomfiting all hostile attempts of foreigners, which the weakness of that kingdom hath heretofore invited: wherein I shall not need to fetch reasons afar off, either for the general or particular. For the general, because nothing is more evident than that, which one of the Romans said of Peloponnesus: "Testudo intra tegumen tuta est;" the tortoise is safe within her shell: but if she put forth any part of her body, then it endangereth not only the part which is so put forth, but all the rest. And so we see in armour, if any part be left naked, it puts in hazard the whole person. And in the natural body of man, if there be any weak or affected part, it is enough to draw rheums or malign humours unto it, to the interruption of the health of the whole body.

And for the particular, the example is too fresh, that the indisposition of that kingdom hath been a continual attractive of troubles and infestations upon this estate; and though your majesty's greatness doth in some sort discharge this fear, yet with your increase of power it cannot be, but envy is likewise increased.

The fourth and last consequence is the great profit and strength which is like to redound to your crown, by the working upon this unpolished part thereof: whereof your majesty, being in the strength of your years, is like, by the good pleasures of Almighty God, to receive more than the first-fruits; and your posterity a growing and springing vein of riches and power. For this island being another Britain, as Britain was said to be another world, is endowed with so many dowries of nature, considering the fruitfulness of the soil, the ports, the rivers, the fishings, the quarries, the woods, and other materials; and especially the race and generation of men, valiant, hard, and active, as it is not easy, no, not upon the continent, to find such confluence of commodities, if the hand of man did join with the hand of nature. So, then, for the excellency of the work, in point of honour, policy, safety, and utility, here I cease.

For the means to effect this work, I know your majesty shall not want the information of persons expert and industrious, which have served you there, and know the region: nor the advice of a grave and prudent council of estate here; which knew the pulses of the hearts of people, and the ways and passages of conducting great actions; besides that which is above all, which is that fountain of wisdom and universality which is in yourself; yet, notwithstanding, in a thing of so public a nature, it is not amiss for your majesty to hear variety of opinion: for, as Demosthenes saith well, the good fortune of a prince or state doth sometimes put a good motion into a fool's mouth. I do think therefore the means of accomplishing this work consisteth of two principal parts. The first, the invitation and encouragement of undertakers; the second, the order and policy of the

project itself. For as in all engines of the hand there is somewhat that giveth the motion and force, and the rest serveth to guide and govern the same: so it is in these enterprises or engines of estate. As for the former of these, there is no doubt, but next unto the providence and finger of God, which writeth these virtues and excellent desires in the tables of your majesty's heart; your authority and affection is "primos motor" in this cause; and therefore the more strongly and fully your majesty shall declare yourself in it, the more shall you quicken and animate the whole proceeding. For this is an action, which is as the worthiness of it doth bear it, so the nature of it requireth it to be carried in some height of reputation, and fit, in mine opinion, for pulpits and parliaments, and all places to ring and resound of it. For that which may seem vanity in some things, I mean matter of fame, is of great efficacy in this case.

But now let me descend to the inferior spheres, and speak what co-operation in the subjects or undertakers may be raised and kindled, and by what means. Therefore, to take plain grounds, which are the surest: all men are drawn into actions by three things, pleasure, honour, and profit. But before I pursue these three motives, it is fit in this place to interlace a word or two of the quality of the undertakers: wherein my opinion simply is, that if your majesty shall make these portions of land which are to be planted, as rewards or as suits, or as fortunes for those that are in want, and are likeliest to seek after them; that they will not be able to go through with the charge of good and substantial plantations, but will "deficere in opere medio;" and then this work will succeed, as Tacitus saith, "acribus initiis, fine incurioso." So that this must rather be an adventure for such as are full, than a setting up of those that are low of means; for those men indeed are fit to perform these undertakings, which were fit to purchase dry reversions after lives or years, or such as were fit to put out money upon long returns.

I do not say, but that I think the undertakers themselves will be glad to have some captains, or men of service, intermixed among them for their safety; but I speak of the generality of undertakers, which I wish were men of estate and plenty.

Now, therefore, it followeth well to speak of the aforesaid three motives. For it will appear the more, how necessary it is to allure by all means undertakers: since those men will be least fit, which are like to be most in appetite of themselves; and those most fit, which are like least to desire it.

First, therefore, for pleasure; in this region or tract of soil, there are no warm winters, nor orange trees, nor strange beasts, or birds, or other points of curiosity or pleasure, as there are in the Indies and the like: so as there can be found no foundation made upon matter of pleasure, otherwise than that the very general desire of novelty and experiment in some stirring natures may work somewhat; and therefore it is the other two points, of honour and profit, whereupon we are wholly to rest.

For honour or countenance, if I shall mention to your majesty, whether in wisdom you shall think convenient, the better to express your affection to the enterprise, and for a pledge thereof, to add the earldom of Ulster to the prince's titles, I shall but learn it out of the practice of King Edward I., who first used the like course, as a mean the better to restrain the country of Wales: and, I take it, the Prince of Spain hath the addition of a province in the kingdom of Naples: and other precedents I think there are: and it is like to put more life and encouragement into the undertakers.

Also, considering the large territories which are to be planted, it is not unlike your majesty will think of raising some nobility there; which, if it be done merely upon new titles of dignity, having no manner of reference to the old; and if it be done also without putting too many portions into one hand: and, lastly, if it be done without any great franchises or commands, I do not see any peril can ensue thereof. As, on the other side, it is like it may draw some persons of great estate and means into the action, to the great furtherance and supply of the charges thereof.

And, lastly, for knighthood, to such persons as have not attained it; or otherwise knighthood, with some new difference and precedence, it may, no doubt, work with many. And if any man think, that these things which I propound, are "aliquid nimis" for the proportion of this action, I confess plainly, that if your majesty will have it really and effectually performed, my opinion is, you cannot bestow too much sunshine upon it. For "lunæ radiis non maturescit botrus." Thus much for honour.

For profit, it will consist in three parts:

First, The easy rates that your majesty shall be pleased to give the undertakers of the land they shall receive.

Secondly, The liberties which you may be pleased to confer upon them. When I speak of liberties, I mean, not liberties of jurisdiction, as counties palatine, or the like, which it seemeth hath been the error of the ancient donations and plantations in that country, but I mean only liberties tending to commodity; as liberty to transport any of the commodities growing upon the countries new planted; liberty to import from hence all things appertaining to their necessary use, custom-free; liberty to take timber or other materials in your majesty's woods there, and the like.

The third is, ease of charge; that the whole mass of charge doth not rest upon the private purse of the undertakers.

For the two former of these, I will pass them over; because in that project, which with good diligence and providence hath been presented to your majesty by your ministers of that kingdom, they are in my opinion well handled.

For the third, I will never despair, but that the parliament of England, if it may perceive, that this action is not a flash, but a solid and settled pursuit, will give aid to a work so religious, so politic, and so profitable. And the distribution of charge, if it be observed, falleth naturally into three kinds of charge, and every of those charges respectively ought to have his proper fountain and issue. For as there proceedeth from your majesty's royal bounty and munificence, the gift of the land, and the other materials; together with the endowment of liberties; and as the charge which is private, as building of houses, stocking of grounds, victual, and the like, is to rest upon the particular undertakers: so whatsoever is public, as building of churches, walling of towns, town-houses, bridges, causeways, or highways, and the like, ought not so properly to lie upon particular persons, but to come from the public estate of this kingdom; to which this work is like to return so great an addition of glory, strength, and commodity.

For the project itself, I shall need to speak the less, in regard it is so considerately digested already for the county of Tyrone: and therefore my labour shall be but in those things wherein I shall either add to, or dissent from that which is set down; which will include five points or articles.

First, they mention a commission for this plantation: which of all things is most necessary, both to direct, and appease controversies, and the like.

To this I add two propositions: the one, that which perhaps is meant, though not expressed, that the commissioners should for certain times reside and abide in some habitable town of Ireland, near in distance to the country where the plantation shall be; to the end, both that they may be more at hand, for the execution of the parts of their commission; and withal it is like, by drawing a concourse of people and tradesmen to such towns, it will be some help and commodity to the undertakers for things they shall stand in need of: and, likewise, it will be a more safe place of receipt and store, wherein to unlade and deposit such provisions as are after to be employed.

The second is, that your majesty would make a correspondency between the commission there, and a council of plantation here: wherein I warrant myself by the precedent of the like council of plantation for Virginia; an enterprise in my opinion differing as much from this, as Amadis de Gaul differs from Cæsar's Commentaries. But when I speak of a council of plantation, I mean some persons chosen by way of reference, upon whom the labour may rest, to prepare and report things to the council of estate here, that concern that business. For although your majesty have a grave and sufficient council in Ireland; from whom, and upon whom, the commissioners are to have assistance and dependence; yet that supplies not the purpose whereof I speak. For, considering, that upon the advertisements, as well of the commissioners, as of the council of Ireland itself, there will be many occasions to crave directions from your majesty and your privy council here, which are busied with a world of affairs; it cannot but give greater expedition, and some better perfection unto such directions and resolutions, if the matters may be considered of aforehand by such as may have a continual care of the cause. And it will be likewise a comfort and satisfaction to some principal undertakers, if they may be admitted of that council.

Secondly, There is a clause wherein the undertakers are restrained, that they shall execute the plantation in person; from which I must dissent, if I will consent with the grounds I have already taken. For it is not probable that men of great means and plentiful estate will endure the travel, diseasements, and adventures of going thither in person: but rather, I suppose, many will undertake portions as an advancement for their younger children or kinsfolks; or for the sweetness of the expectation of a great bargain in the end, when it is overcome. And, therefore, it is like they will employ sons, kinsfolks, servants, or tenants, and yet be glad to have the estate in themselves. And it may be, some again will join their purses together, and make as it were a partnership or joint adventure; and yet man forth some one person by consent, for the executing of the plantation.

Thirdly, There is a main point, wherein I fear the project made hath too much of the line and compass, and will not be so natural and easy to execute, nor yet so politic and convenient: and that is, that the buildings should be "sparsim" upon every portion; and the castle or principal house should draw the tenements and farms about it, as it were into villages, hamlets, or endships; and that there should be only four corporate towns for the artificers and tradesmen.

My opinion is, that the buildings be altogether in towns, to be compounded as well of husbandries as of arts. My reasons are,

First, When men come into a country vast, and void of all things necessary for the use of man's life, if they set up together in a place, one of them will the better supply the wants of another: work-folks of all sorts will be the more continually on work without loss of time; when, if work fail in one place, they may have it fast by; the ways will be made more passable for carriages to those seats or towns, than they can be to a number of dispersed solitary places; and infinite other helps and easements, scarcely to be comprehended in cogitation, will ensue in vicinity and society of

ple: whereas, if they build scattered, as is projected, every man must have a cornucopia in himself for all things he must use; which cannot but breed much difficulty and no less waste.

Secondly, it will draw out of the inhabited country of Ireland provisions and victuals, and many necessaries; because they shall be sure of utterance: whereas, in the dispersed habitations, every man must reckon only upon that that he brings with him, as they do in provisions of ships.

Thirdly, the charge of bawnes, as they call them, to be made about every castle or house, may be spared, when the habitations shall be congregated only into towns.

And, lastly, it will be a means to secure the country against future perils, in case of any revolt and defection: for by a slight fortification of no great charge, the danger of any attempts of kierns and sword-men may be prevented; the omission of which point, in the last plantation of Munster, made the work of years to be but the spoil of days. And if any man think it will draw people too far off from the grounds they are to labour, it is to be understood, that the number of the towns be increased accordingly; and, likewise, the situation of them be as in the centre, in respect of the portions assigned to them; for in the champaign countries of England, where the habitation useth to be in towns, and not dispersed, it is no new thing to go two miles off to plough part of their grounds; and two miles compass will take up a good deal of country.

The fourth point, is a point wherein I shall differ from the project rather in quantity and proportion, than in matter. There is allowed to the undertaker, within the five years of restraint, to alien a third part in fee farm, and to demise another third for forty years: which I fear will mangle the portions, and will be but a shift to make money of two parts; whereas, I am of opinion, the more the first undertaker is forced to keep in his own hands, the more the work is like to prosper. For, first, the person liable to the state here to perform the plantation, is the immediate undertaker. Secondly, the more his profit dependeth upon the annual and springing commodity, the more sweetness he will find in putting forward manurance and husbanding of the grounds, and therefore is like to take more care of it. Thirdly, since the natives are excluded, I do not see that any persons are like to be drawn over of that condition, as are like to give fines, and undertake the charge of building. For I am persuaded, that the people transported will consist of gentlemen and their servants, and of labourers and hinds, and not of yeomen of any wealth. And, therefore, the charge of buildings, as well of the tenements and farms, as of the capital houses themselves, is like to rest upon the principal undertakers. Which will be recompensed in the end to the full, and with much advantage, if they make no long estates or leases. And, therefore, this article to receive some qualification.

Fifthly, I should think it requisite that men of experience in that kingdom should enter into some particular consideration of the charges and provisions of all kinds, that will be incident to the plantation; to the end, that thereupon some advice may be taken for the furnishing and accommodating them most conveniently, aiding private industry and charge with public care and order.

Thus I have expressed to your majesty those simple and weak cogitations, which I have had in myself touching this cause, wherein I most humbly desire your pardon, and gracious acceptance of my good affection and intention. For I hold it for a rule, that there belongeth to great monarchs, from faithful servants, not only the tribute of duty, but the oblations of cheerfulness of heart. And so I pray the Almighty to bless this great action, with your majesty's care; and your care with happy success.

A LETTER

TO

MR. SECRETARY CECIL,

AFTER THE DEFEATING OF THE SPANISH FORCES IN IRELAND;* INCITING HIM TO EMBRACE THE CARE OF REDUCING THAT KINGDOM TO CIVILITY, WITH SOME REASONS SENT ENCLOSED.

IT MAY PLEASE YOUR HONOUR,

As one that wisheth you all increase of honour; and as one that cannot leave to love the state, what interest soever I have, or may come to have in it; and as one that now this dead vacation time hath some leisure "ad aliud agendum;" I will presume to propound unto you that which though you cannot but see, yet I know not whether you apprehend and esteem it in so high a degree; that is, for the best action of importation to yourself, of sound honour and merit to her majesty and this crown, without ventosity and popu-

* Therefore this was wrote in 1601.—*Bacon's Resuscitatio*, 56.

larity, that the riches of any occasion, or the tide of any opportunity, can possibly minister or offer; and that is the causes of Ireland, if they be taken by the right handle. For if the wound be not ripped up again, and come to a recrudency by new foreign succours, I think that no physician will go on much with letting of blood, "in declinatione morbi;" but will intend to purge and corroborate. To which purpose I send you mine opinion, without labour of words, in the enclosed; and sure I am, that if you shall enter into the matter according to the vivacity of your own spirit, nothing can make unto you a more gainful return. For you shall make the queen's felicity complete, which now, as it is, is incomparable: and for yourself, you shall show yourself as good a patriot as you are thought a politic, and make the world perceive you have not less generous ends, than dexterous delivery of yourself towards your ends; and that you have as well true arts and grounds of government, as the facility of practice and negotiation; and that you are as well seen in the periods and tides of estates, as in your own circle and way: than the which, I suppose, nothing can be a better addition and accumulation of honour unto you. This, I hope, I may in privateness write, either as a kinsman, that may be bold: or as a scholar, that hath liberty of discourse, without committing any absurdity. But if it seemeth any error in me thus to intromit myself, I pray your honour to believe, I ever loved her majesty and the state, and now love yourself; and there is never any vehement love without some absurdity, as the Spaniard well says: "desuario con la calentura." So, desiring your honour's pardon, I ever continue.

CONSIDERATIONS TOUCHING THE QUEEN'S SERVICE IN IRELAND.*

The reduction of that country, as well to civility and justice, as to obedience and peace, which things, as affairs now stand, I hold to be inseparable, consisteth in four points:

1. The extinguishing of the relics of the war.
2. The recovery of the hearts of the people.
3. The removing of the root and occasions of new troubles.
4. Plantations and buildings.

For the first; concerning the places and times, and particularities of farther prosecution, in fact, I leave it to the opinion of men of war; only the difficulty is, to distinguish and discern the propositions, which shall be according to the ends of the state here, that is, final and summary towards the extirpation of the troubles, from those, which, though they pretend public ends, yet may refer indeed to the more private and compendious ends of the council there: or of the particular governors or captains. But still, as I touched in my letter, I do think much letting blood, "in declinatione morbi," is against method of cure: and that it will but induce necessity, and exasperate despair: and percase discover the hollowness of that which is done already, which now blazeth to the best show. For Iaglia's and proscriptions of two or three of the principal rebels, they are, no doubt, "jure gentium," lawful: in Italy usually practised upon the banditti; best in season when a side goeth down: and may do good in two kinds; the one, if they take effect: the other, in the distrust which may follow amongst the rebels themselves. But of all other points, to my understanding, the most effectual is, the well expressing or impressing the design of this state, upon that miserable and desolate kingdom; containing the same, between these two lists or boundaries; the one, that the queen seeketh not an extirpation of that people, but a reduction; and that, now she hath chastised them by her royal power and arms, according to the necessity of the occasion, her majesty taketh no pleasure in effusion of blood, or displanting of ancient generations. The other, that her majesty's princely care is principally and intentionally bent upon the action of Ireland; and that she seeketh not so much the ease of charge, as the royal performance of the office of protection, and reclaim of those her subjects: and, in a word, that the case is altered so far as may stand with the honour of the time past: which it is easy to reconcile, as in my last note I showed. And, again, I do repeat, that if her majesty's design be "ex professo" to reduce wild and barbarous people to civility and justice, as well as to reduce rebels to obedience, it makes weakness turn Christianity, and conditions graces; and so hath a fineness in turning utility upon point of honour, which is agreeable to the humour of these times. And, besides, if her majesty shall suddenly abate the lists of her forces, and shall do nothing to countervail it in point of reputation, of a politic proceeding, I doubt things may too soon fall back into the state they were in. Next to this; adding reputation to the cause, by imprinting an opinion of her majesty's care and intention upon this action, is the taking away of reputation from the contrary side, by cutting off the opinion and expectation of foreign succours; to which purpose this enterprise of Algiers, if it hold according to the advertisement, and if it be not wrapped up in the period of this summer, seemeth to be an opportunity "cœlitus demissa." And to the same purpose nothing can be more fit than a treaty or a shadow of a treaty of a peace with Spain, which methinks should be in our power to fasten at least "rumore tenus," to the deluding of as wise people as the Irish. Lastly, for this point; that which the ancients called "potestas facta redeundi ad sanitatem;" and which is but a mockery when the enemy is strong, or proud, but effectual

* Resuscitatio, 264.

in his declination; that is, a liberal proclamation of grace and pardon to such as shall submit, and come in within a time prefixed, and of some farther reward, to such as shall bring others in; that one's sword may be sharpened by another's, is a matter of good experience, and now, I think, will come in time. And percase, though I wish the exclusions of such a pardon exceeding few, yet it will not be safe to continue some of them in their strength, but to translate them and their generations into England: and give them recompense and satisfaction here for their possessions there, as the King of Spain did, by divers families of Portugal. To the effecting of all the points aforesaid, and likewise those which fall within the divisions following, nothing can be in priority, either time or matter, better than the sending of some commission of countenance, "ad res inspiciendas et componendas;" for it will be a very significant demonstration of her majesty's care of that kingdom; a credence to any that shall come in and submit; a bridle to any that shall have their fortunes there, and shall apply their propositions to private ends; and an evidence that her majesty, after arms laid down, speedily pursueth a politic course, without neglect or respiration: and it hath been the wisdom of the best examples of government.

Towards the recovery of the hearts of the people, there be but three things, "in natura rerum."

1. Religion.
2. Justice and protection.
3. Obligation and reward.

For religion, to speak first of piety, and then of policy, all divines do agree, that if consciences be to be enforced at all, wherein yet they differ, two things must precede their enforcement: the one, means of instruction; the other, time of operation; neither of which they have yet had. Besides, till they be more like reasonable men than they yet are, their society were rather scandalous to the true religion, than otherwise; as pearls cast before swine: for till they be cleansed from their blood, incontinency, and theft, which are now not the lapses of particular persons, but the very laws of the nation, they are incompatible with religion reformed. For policy, there is no doubt but to wrestle with them now, is directly opposite to their reclaiming, and cannot but continue their alienation of mind from this government. Besides, one of the principal pretences, whereby the heads of the rebellion have prevailed both with the people, and with the foreigner, hath been the defence of the Catholic religion: and it is this that likewise hath made the foreigner reciprocally more plausible with the rebel. Therefore a toleration of religion, for a time, not definite, except it be in some principal towns and precincts, after the manner of some French edicts, seemeth to me to be a matter warrantable by religion, and in policy of absolute necessity. And the hesitation in this point, I think, hath been a great casting back of the affairs there. Neither if any English papist or recusant shall, for liberty of his conscience, transfer his person, family, and fortunes thither; do I hold it a matter of danger, but expedient to draw on undertaking, and to further population. Neither if Rome will cozen itself, by conceiving it may be in some degree to the like toleration in England, do I hold it a matter of any moment; but rather a good mean to take off the fierceness and eagerness of the humour of Rome, and to stay further excommunications or interdictions for Ireland. But there would go hand in hand with this, some course of advancing religion indeed, where the people is capable thereof; as the sending over some good preachers, especially of that sort which are vehement and zealous persuaders, and not scholastical, to be resident in principal towns; endowing them with some stipends out of her majesty's revenues, as her majesty hath most religiously and graciously done in Lancashire: and the recontinuing and replenishing the college begun at Dublin, the placing of good men to be bishops in the sees there, and the taking care of the versions of Bibles and catechisms, and other books of instruction, into the Irish language; and the like religious courses, both for the honour of God, and for the avoiding of scandal and insatisfaction here, by the show of a toleration of religion in some parts there.

For justice; the barbarism and desolation of the country considered, it is not possible they should find any sweetness at all of justice: if it should be, which hath been the error of times past, formal, and fetched far off from the state; because it will require running up and down from process; and give occasion for polling and exactions by fees, and many other delays and charges. And therefore there must be an interim in which the justice must be only summary: the rather, because it is fit and safe for a time the country do participate of martial government; and, therefore, I could wish in every principal town or place of habitation, there were a captain or governor; and a judge, such as recorders, and learned stewards are here in corporations, who may have a prerogative commission to hear and determine "secundum sanam discretionem;" and as near as may be to the laws and customs of England; and that by bill or plaint, without original writ; reserving from their sentence matter of freehold and inheritance, to be determined by a superior judge itinerant; and both sentences, as well of the bailiwick judge, as itinerant, to be reversed, if cause be, before the council of the province to be established there with fit instructions.

For obligation and reward; it is true, no doubt, which was anciently said, that a state is contained in two words, "præmium" and "pœna;" and I

am persuaded, if a penny in the pound which hath been spent in "pœna," for this kind of war is but "pœna," a chastisement of rebels, without fruit or emolument to this state, had been spent in "præmio," that is, in rewarding, things had never grown to this extremity. But to speak forwards. The keeping of the principal Irish persons in terms of contentment, and without cause of particular complaint; and generally the carrying of an even course between the English and Irish; whether it be in competition or whether it be in controversy, as if they were one nation, without that same partial course which hath been held by the governors and counsellors there, that some have favoured the Irish, and some contrary, is one of the best medicines of that state. And as for other points of contentment, as the countenancing of their nobility as well in this court as there; the imparting of knighthood; the care of education of their children, and the like points of comfort and allurement; they are things which fall into every man's consideration.

For the extripating of the seeds of troubles, I suppose the main roots are but three. The first, the ambition and absoluteness of the chief of the families and septs. The second, the licentious idleness of their kernes and soldiers, that lie upon the country, by cesses and such like oppressions. And the third, the barbarous laws, customs, their brehon laws, habits of apparel, their poets or heralds that enchant them in savage manners, and sundry other such dregs of barbarism and rebellion, which by a number of politic statutes of Ireland, meet to be put in execution, are already forbidden; unto which such additions may be made as the present time requireth. But the deducing of this branch requireth a more particular notice of the state and manners there, than falls within my compass.

For plantations and buildings, I do find it strange that in the last plot for the population of Munster, there were limitations how much in demesne, and how much in farm, and how much in tenancy; again, how many buildings should be erected, how many Irish in mixture should be admitted, and other things foreseen almost to curiosity; but no restraint that they might not build "sparsim" at their pleasure; nor any condition that they should make places fortified and defensible: which omission was a strange neglect and secureness, to my understanding. So as for this last point of plantations and buildings, there be two considerations which I hold most material; the one for quickening, the other for assuring. The first is, that choice be made of such persons for the government of towns and places, and such undertakers be procured, as be men gracious and well beloved, and are like to be well followed. Wherein for Munster, it may be, because it is not "res integra;" but that the former undertakers stand interested, there will be some difficulty: but surely, in mine opinion, either by agreeing with them; or by overruling them with a parliament in Ireland, which in this course of a politic proceeding, infinite occasions will require speedily to be held, it will be fit to supply fit qualified persons or undertakers. The other, that it be not left, as heretofore, to the pleasure of the undertakers and adventurers, where and how to build and plant; but that they do it according to a prescript or formulary. For, first, the places, both maritime and inland, which are fittest for colonies or garrisons, as well for doubt of the foreigner, as for keeping the country in bridle, would be found, surveyed, and resolved upon: and then that the patentees be tied to build in those places only, and to fortify as shall be thought convenient. And, lastly, it followeth of course, in countries of new populations, to invite and provoke inhabitants by ample liberties and charters.

TO SIR GEORGE VILLIERS.

SIR,

I SEND you enclosed a warrant for my lady of Somerset's pardon, reformed in that main and material point, of inserting a clause, [that she was not a principal, but an accessary before the fact, by the instigation of base persons.] Her friends think long to have it despatched, which I marvel not at, for that in matter of life moments are numbered.

I do more and more take contentment in his majesty's choice of Sir Oliver St. John, for his deputy of Ireland, finding, upon divers conferences with him, his great sufficiency; and I hope the good intelligence, which he purposeth to hold with me by advertisements from time to time, shall work a good effect for his majesty's service.

I am wonderful desirous to see that kingdom flourish, because it is the proper work and glory of his majesty and his times. And his majesty may be pleased to call to mind, that a good while since, when the great rent and divisions were in the parliament of Ireland, I was no unfortunate remembrancer to his majesty's princely wisdom in that business. God ever keep you and prosper you.

Your true and most devoted
and bounden servant,
FR. BACON.

1 July, 1616.*

TO SIR GEORGE VILLIERS.

SIR,

I THINK I cannot do better service towards the good estate of the kingdom of Ireland than to procure the king to be well served in the eminent places of law and justice; I shall therefore name unto you for the attorney's place there, or for the

* Stephens's Second Collection, p. 3.

solicitor's place, if the new solicitor shall go up, a gentleman of mine own breeding and framing, Mr. Edward Wyrthington, of Gray's-Inn; he is born to eight hundred pounds a year; he is the eldest son of a most severe justicer, amongst the recusants of Lancashire, and a man most able for law and speech, and by me trained in the king's causes. My lord deputy, by my description, is much in love with the man. I hear my Lord of Canterbury, and Sir Thomas Laque, should name one Sir John Beare, and some other mean men. This man I commend upon my credit, for the good of his majesty's service. God ever preserve and prosper you. I rest

Your most devoted
and most bounden servant,
FR. BACON.

2 July, 1616 *

TO SIR GEORGE VILLIERS, ABOUT IRISH AFFAIRS.

SIR,

BECAUSE I am uncertain whether his majesty will put to a point some resolutions touching Ireland, now at Windsor; I thought it my duty to attend his majesty by my letter, and thereby to supply my absence, for the renewing of some former commissions for Ireland, and the framing of a new commission for the wards and the alienations, which appertain properly to me as his majesty's attorney, and have been accordingly referred by the lords. I will undertake that they are prepared with a greater care, and better application to his majesty's service in that kingdom, than heretofore they have been; and therefore of that I say no more. And for the instructions of the new deputy, they have been set down by the two secretaries, and read to the board; and being things of an ordinary nature, I do not see but they may pass.

But there have been three propositions and counsels which have been stirred, which seem to me of very great importance; wherein I think myself bound to deliver to his majesty my advice and opinion, if they should now come in question.

The first is, touching the recusant magistrates of the towns of Ireland, and the commonalties themselves their electors, what shall be done? Which consultation ariseth from the late advertisements of the two lords justices, upon the instance of the two towns, Limerick and Kilkenny; in which advertisements they represent the danger only, without giving any light for the remedy; rather warily for themselves, than agreeably to their duties and places.

In this point I humbly pray his majesty to remember, that the refusal is not of the oath of allegiance, which is not enacted in Ireland, but of the oath of supremacy, which cutteth deeper into matter of conscience. A so, that his majesty will, out of the depth of his excellent wisdom and providence, think, and, as it were, calculate with himself, whether time will make more for the cause of religion in Ireland, and be still more and more propitious; or whether deferring remedies will not make the case more difficult. For, if time give his majesty advantage, what needeth precipitation to extreme remedies? But if time will make the case more desperate, then his majesty cannot begin too soon. Now, in my opinion, time will open and facilitate things for reformation of religion there, and not shut up and lock out the same. For, first, the plantations going on, and being principally of Protestants, cannot but mate the other party in time; also his majesty's care in placing good bishops and divines, in amplifying the college there, and in looking to the education of wards and the like, as they are the most natural means, so are they like to be the most effectual and happy for the weeding out of popery, without using the temporal sword; so that, I think, I may truly conclude, that the ripeness of time is not yet come.

Therefore my advice in all humbleness is, that this hazardous course of proceeding, to tender the oath to the magistrates of towns, proceed not, but die by degrees. And yet, to preserve the authority and reputation of the former council, I would have somewhat done; which is, that there be a proceeding to seizure of liberties; but not by any act of power, but by "Quo warranto," or "Scire facias;" which is a legal course; and will be the work of three or four terms; by which time the matter will somewhat cool.

But I would not, in any case, that the proceeding should be with both the towns, which stand now in contempt, but with one of them only, choosing that which shall be thought most fit. For if his majesty proceed with both, then all the towns that are in the like case will think it a common cause; and that it is but their case to day, and their own to-morrow. But if his majesty proceed with one, the apprehension and terror will not be so strong; for they will think it may be their case as well to be spared as prosecuted; and this is the best advice that I can give to his majesty in this strait; and of this opinion seemed my lord chancellor to be.

The second proposition is this: It may be his majesty will be moved to reduce the number of his council of Ireland, which is now almost fifty, to twenty, or the like number; in respect the greatness of the number doth both embase the authority of the council, and divulge the business. Nevertheless, I do hold this proposition to be rather specious and solemn, than needful at this time; for certainly it will fill the state full of discontentment; which in a growing and unsettled estate ought not to be.

This I could wish; that his majesty would

* Stephens's Second Collection, p. 5.

appoint a select number of counsellors there, which might deal in the improvement of his revenue, being a thing not fit to pass through too many hands, and that the said selected number should have days of sitting by themselves, at which the rest of the council should not be present; which being once settled, then other principal business of state may be handled at those sittings, and so the rest begin to be disused, and yet retain their countenance without murmur or disgrace.

The third proposition, as it is wound up, seemeth to be pretty, if it can keep promise; for it is this, that a means may be found to reinforce his majesty's army there by 500 or 1000 men; and that without any penny increase of charge. And the means should be, that there should be a commandment of a local removing, and transferring some companies from one province to another; whereupon it is supposed, that many that are planted in house and lands, will rather lose their entertainment than remove; and thereby new men may have their pay, and yet the old be mingled in the country for the strength thereof.

In this proposition two things may be feared; the one, discontent of those that shall be put off; the other, that the companies shall be stuffed with "Tirones," instead of "Veterani." I wish therefore that this proposition be well debated ere it be admitted. Thus having performed that which duty binds me to do, I commend you to God's best preservation.

Your most devoted and bounden servant,

FR. BACON.

Gorhambury, July 5, 1616.*

* Stephens's Second Collection, p. 5.

TRACTS RELATING TO SPAIN.

A REPORT

MADE

BY SIR FRANCIS BACON, KNIGHT,

IN THE HOUSE OF COMMONS,

OF A SPEECH DELIVERED BY THE EARL OF SALISBURY; AND ANOTHER SPEECH DELIVERED BY THE EARL OF NORTHAMPTON, AT A CONFERENCE CONCERNING

THE PETITION OF THE MERCHANTS UPON THE SPANISH GRIEVANCES.

PARLIAMENT 5 JACOBI.

And it please you, Mr. Speaker, I do not find myself any ways bound to report that which passed at the last conference touching the Spanish grievances, having been neither employed to speak, nor appointed to report in that cause. But because it is put upon me by a silent expectation, grounded upon nothing, that I know, more than that I was observed diligently to take notes; I am content, if that provision which I made for mine own remembrance may serve this House for a report, not to deny you that sheaf that I have in haste bound up. It is true, that one of his majesty's principal counsellors in causes of estate did use a speech that contained a world of matter; but how I shall be able to make a globe of that world, therein I fear mine own strength.

His lordship took the occasion of this, which I shall now report, upon the answer which was by us made to the amendments propounded upon the bill of hostile laws; quitting that business with these few words; that he would discharge our expectation of reply, because their lordships had no warrant to dispute. Then continuing his speech, he fell into this other cause, and said; that being now to make answer to a proposition of ours, as we had done to one of theirs, he wished it could be passed over with like brevity. But he did foresee his way, that it would prove not only long, but likewise hard to find, and hard to keep: this cause being so to be carried, as above all no wrong be done to the king's sovereignty and authority: and, in the second place, no misunderstanding do ensue between the two Houses. And therefore that he hoped his words should receive a benign interpretation; knowing well that pursuit and drift of speech, and multitude of matter, might breed words to pass from him beyond the compass of his intention; and therefore he placed more assurance and caution in the innocency of his own meaning, and in the experience of our favours, than in any his wariness or watchfulness over his own speech.

This respective preface used, his lordship descended to the matter itself, which he divided into three considerations: for he said he would consider of the petition.

First, As it proceeded from the merchants.

Secondly, As from them it was offered to the Lower House.

And, thirdly, As from the Lower House it was recommended to the Higher House.

In the first of these considerations there fell out naturally a subdivision into the persons of the petitioners, and the matter and parts of the petition. In the persons of the merchants his lordship made, as I have collected them in number, eight observations, whereof the three first respected the general condition of merchants; and the five following were applied to the particular circumstances of the merchants now complaining.

His lordship's first general observation was, that merchants were of two sorts; the one sought their fortunes, as the verse saith, "per saxa, per ignes;" and, as it is said in the same place, "extremos currit mercator ad Indos;" subjecting themselves to weather and tempest; to absence,

and, as it were, exile, out of their native countries; to arrest in entrances of war; to foreign injustice and rigour in times of peace; and many other sufferances and adventures. But that there were others that took a more safe, but a less generous course in raising their fortunes. He taxed none, but did attribute much more respect to the former.

The second general observation which his lordship made was, that the complaints of merchants were usually subject to much error, in regard that they spake, for the most part, but upon information; and that carried through many hands; and of matters done in remote parts; so as a false or factious factor might oftentimes make great tragedies upon no great ground. Whereof, towards the end of his speech he brought an instance of one trading into the Levant, that complained of an arrest of his ship, and possessed the council table with the same complaint in a vehement and bitter fashion; desiring and pressing some present and expostulatory letters touching the same. Whereupon some counsellors, well acquainted with the like heats, and forwardness in complaints, happened to say to him out of conjecture, and not out of any intelligence, "What will you say if your ship, which you complain to be under arrest, be now under sail in way homewards?" Which fell out accordingly: the same person confessing, six days after, to the lords, that she was indeed in her way homewards.

The third general observation which his lordship made was this, in effect; that although he granted that the wealth and welfare of the merchant was not without a sympathy with the general stock and state of a nation, especially an island; yet, nevertheless, it was a thing too familiar with the merchant, to make the case of his particular profit, the public case of the kingdom.

There follow the particular observations, which have a reference and application to the merchants that trade to Spain and the Levant; wherein his lordship did first honourably and tenderly acknowledge that their grievances were great, that they did multiply, and that they do deserve compassion and help: but yet, nevertheless, that he must use that loving plainness to them as to tell them that in many things they were authors of their own miseries. For since the dissolving of the company, which was termed the monopoly, and was set free by the special instance of this House, there hath followed such a confusion and relaxation in order and government amongst them, as they do not only incur many inconveniences, and commit many errors, but in the pursuits of their own remedies and suits they do it so impoliticly, and after such a fashion as, except lieger ambassadors, which are the eyes of kings in foreign parts, should leave their sentinel, and become merchants' factors, and solicitors, their causes can hardly prosper. And, which is more, such is now the confusion in the trade, as shopkeepers and handicraftsmen become merchants there; who being bound to no orders, seek base means by gifts and bribery, to procure favours at the hands of officers there. So as the honest merchant, that trades like a substantial merchant, and loves not to take servile courses to buy the right due to him by the amity of the princes, can have no justice without treading in their steps.

Secondly, His lordship did observe some improbability that the wrongs should be so great, considering trading into those parts was never greater; whereas, if the wrongs and griefs were so intolerable and continual, as they propound them and voiced them, it would work rather a general discouragement and coldness of trade in fact, than an earnest and hot complaint in words.

Thirdly, His lordship did observe, that it is a course, howsoever it may be with a good intent, yet, of no small presumption, for merchants upon their particular grievances to urge things tending to a direct war, considering that nothing is more usual in treaties, than that such particular damages and molestations of subjects are left to a form of justice to be righted: and that the more high articles do retain nevertheless their vigour inviolably; and that the great bargain of the kingdom for war and peace may in nowise depend upon such petty forfeitures, no more than in common assurance between man and man it were fit that, upon every breach of covenants, there should be limited a re-entry.

Fourthly, His lordship did observe, in the manner of preferring their petition, they had inverted due order, addressing themselves to the foot, and not to the head. For, considering that they prayed no new law for their relief, and that it concerned matter of inducement to war or peace, they ought to have begun with his majesty: unto whose royal judgment, power, and office, did properly belong the discerning of that which was desired, the putting in act of that which might be granted, and the thanks for that which might be obtained.

Fifthly, His lordship did observe that as they had not preferred their petition as it should be, so they had not pursued their own direction as it was. For having directed their petition to the king, the lords spiritual and temporal, and the Commons in parliament assembled, it imported, as if they had offered the like petition to the lords; which they never did: contrary not only to their own direction, but likewise to our conceit, who presupposed, as it should seem, by some speech that passed from us at a former conference, that they had offered several petitions of like tenor to both Houses. So have you now those eight observations, part general, part special, which his lordship made touching the persons of those which exhibited the petition, and the circumstances of the same.

For the matter of the petition itself, his lordship made this division, that it consisteth of three parts.

First, Of the complaints of wrongs in fact.

Secondly, Of the complaints of wrongs in law, as they may be truly termed, that is, of the inequality of laws which do regulate the trade.

And, thirdly, The remedy desired by letters of mart.

The wrongs in fact receive a local distribution of three. In the trade to Spain, in the trade to the West Indies, and in the trade to the Levant.

Concerning the trade to Spain; although his lordship did use much signification of compassion of the injuries which the merchants received; and attributed so much to their profession and estate, as from such a mouth in such a presence they ought to receive for a great deal of honour and comfort, which kind of demonstration he did interlace throughout his whole speech, as proceeding "ex abundantia cordis," yet, nevertheless, he did remember four excusations, or rather extenuations of those wrongs.

The first was, that the injustices complained of were not in the highest degree, because they were delays and hard proceedings, and not inique sentences, or definitive condemnations: wherein I called to mind what I heard a great bishop say, that courts of justice, though they did not turn justice into wormwood by corruption, yet they turned it into vinegar by delays, which soured it. Such a difference did his lordship make, which, no question, is a difference "secundum majus et minus."

Secondly, His lordship ascribed these delays, not so much to malice or alienation of mind towards us, as to the nature of the people and nation, which is proud, and therefore dilatory: for all proud men are full of delays, and must be waited on; and especially to the multitudes and diversities of tribunals and places of justice, and the number of the king's councils, full of referrings, which ever prove of necessity to be deferrings; besides the great distance of territories: all which have made the delays of Spain to come into a byword through the world. Wherein I think his lordship might allude to the proverb of Italy, "Mi venga la morte di Spagna," Let my death come from Spain, for then it is sure to be long a coming.

Thirdly, His lordship did use an extenuation of these wrongs, drawn from the nature of man, "nemo subito fingitur." For that we must make an account, that though the fire of enmity be out between Spain and us, yet it vapoureth: the utter extincting whereof must be the work of time.

But, lastly, his lordship did fall upon that extenuation, which of all the rest was most forcible; which was, that many of these wrongs were not sustained without some aspersion of the merchants' own fault in ministering the occasion, which grew chiefly in this manner.

There is contained an article in the treaty between Spain and us, that we shall not transport any native commodities of the Low Countries into Spain; nay, more, that we shall not transport any opificia, manufactures of the same countries: so that if an English cloth take but a dye in the Low Countries, it may not be transported by the English. And the reason is, because even those manufactures, although the materials come from other places, do yield unto them a profit and sustentation, in regard their people are set on work by them; they have a gain likewise in the price; and they have a custom in the transporting. All which the policy of Spain is to debar them of; being no less desirous to suffocate the trade of the Low Countries, than to reduce their obedience. This article the English merchant either doth not or will not understand: but being drawn with his threefold cord of love, hate, and gain, they do venture to transport the Low Country commodities of these natures, and so draw upon themselves these arrests and troubles.

For the trade to the Indies, his lordship did discover unto us the state of it to be thus: the policy of Spain doth keep that treasury of theirs under such lock and key, as both confederates, yea, and subjects, are excluded of trade into those countries; insomuch as the French king, who hath reason to stand upon equal terms with Spain, yet, nevertheless, is by express capitulation debarred. The subjects of Portugal, whom the state of Spain hath studied by all means to content, are likewise debarred: such a vigilant dragon is there that keepeth this golden fleece; yet, nevertheless, such was his majesty's magnanimity in the debate and conclusion of the last treaty, as he would never condescend to any article, importing the exclusion of his subjects from that trade: as a prince that would not acknowledge that any such right could grow to the crown of Spain by the donative of the pope, whose authority he disclaimeth; or by the title of a dispersed and punctual occupation of certain territories in the name of the rest; but stood firm to reserve that point in full question to farther times and occasions; so as it is left by the treaty in suspense, neither debarred nor permitted: the tenderness and point of honour whereof was such, as they that went thither must run their own peril. Nay, farther, his lordship affirmed, that if yet at this time his majesty would descend to a course of entreaty for the release of the arrests in those parts, and so confess an exclusion, and quit the point of honour, his majesty might have them forthwith released. And yet his lordship added, that the offences and scandals of some had made this point worse than it was, in regard that this very last voyage to Virginia, intended for trade and plantation, where the Spaniard hath no peo-

ple nor possession, is already become infamea for piracy. Witness Bingley, who first insinuating his purpose to be an actor in that worthy action of enlarging trade and plantation, is become a pirate, and hath been so pursued, as his ship is taken in Ireland, though his person is not yet in hold.

For the trade to the Levant, his lordship opened unto us that the complaint consisted in effect but of two particulars: the one touching the arrest of a ship called the Trial, in Sicily; the other of a ship called the Vineyard, in Sardinia. The first of which arrests was upon pretence of piracy; the second, upon pretence of carrying ordnance and powder to the Turk. That process concerning the Trial had been at the merchants' instance drawn to a review in Spain, which is a favour of exceeding rare precedent, being directly against the liberties and privileges of Sicily. That of the Vineyard, notwithstanding it be of that nature, as, if it should be true, tendeth to the great dishonour of our nation, whereof hold hath been already taken by the French ambassador residing at Constantinople, who entered into a scandalous expostulation with his majesty's ambassador there, upon that and the like transportations of munition to the Turk, yet nevertheless there is an answer given, by letters from the king's ambassador lieger in Spain, that there shall be some course taken to give reasonable contentment in that cause, as far as may be: in both which ships, to speak truly, the greatest mass of loss may be included; for the rest are mean, in respect of the value of those two vessels. And thus much his lordship's speech comprehended concerning the wrongs in fact.

Concerning the wrongs in law; that is to say, the rigour of the Spanish laws extended upon his majesty's subjects that traffic thither, his lordship gave this answer. That they were no new statutes or edicts devised for our people, or our times; but were the ancient laws of that kingdom: "Suus cuique mos." And, therefore, as travellers must endure the extremities of the climate, and temper of the air where they travel; so merchants must bear with the extremities of the laws, and temper of the estate where they trade. Whereunto his lordship added, That our own laws here in England were not exempted from the like complaints in foreign parts; especially in point of marine causes and depredations, and that same swift alteration of property, which is claimed by the admiralty in case of goods taken in pirates' hands. But yet that we were to understand thus much of the King of Spain's care and regard of our nation; that he had written his letters to all corregidors, officers of ports, and other his ministers, declaring his will and pleasure to have his majesty's subjects used with all freedom and favour; and with this addition, that they should have more favour, when it might be showed, than any other. Which words, howsoever the effects prove, are not suddenly to be requited with peremptory resolutions, till time declare the direct issue.

For the third part of the matter of the petition, which was the remedy sought by letters of mart, his lordship seemed desirous to make us capable of the inconvenience of that which was desired, by setting before us two notable exceptions thereunto: the one, that the remedy was utterly incompetent and vain; the other, that it was dangerous and pernicious to our merchants, and, in consequence, to the whole state.

For the weakness of the remedy, his lordship wished us to enter into consideration what the remedy was, which the statute of Henry the Fifth, which was now sought to be put in execution, gave in this case: which was thus; That the party grieved should first complain to the keeper of the privy seal, and from him should take letters unto the party that had committed the spoil, for restitution; and in default of restitution to be made upon such letters served, then to obtain of the chancellor letters of mart or reprisal: which circuit of remedy promised nothing but endless and fruitless delay, in regard that the first degree prescribed was never likely to be effected: it being so wild a chase, as to serve process upon the wrongdoer in foreign parts. Wherefore his lordship said, that it must be the remedy of state, and not the remedy of statute, that must do good in this case; which useth to proceed by certificates, attestations, and other means of information; not depending upon a privy seal to be served upon the party, whom haply they must seek out in the West Indies.

For the danger of the remedy, his lordship directed our considerations to take notice of the proportions of the merchants' goods in either kingdom: as that the stock of goods of the Spaniard, which is within his majesty's power and distress, is a trifle; whereas the stock of English goods in Spain is a mass of mighty value. So as if this course of letters of mart should be taken to satisfy a few hot pursuitors here, all the goods of the English subjects in Spain shall be exposed to seizure and arrest: and we have little or nothing in our hands on this side to mend ourselves upon. And thus much, Mr. Speaker, is that which I have collected out of that excellent speech, concerning the first main part, which was the consideration of the petition as it proceeded from the merchant.

There followeth now the second part, considering the petition as it was offered in this House. Wherein his lordship, after an affectionate commemoration of the gravity, capacity, and duty, which he generally found in the proceedings of this House, desired us nevertheless to consider with him, how it was possible that the entertaining petitions concerning private injuries, and of this nature, could avoid these three inconveniences;

the first, of injustice; the second, of derogation from his majesty's supreme and absolute power of concluding war or peace; and the third, of some prejudice in reason of estate.

For injustice, it is plain, and cannot be denied, that we hear but the one part: whereas the rule, "Audi alteram partem," is not of the formality, but of the essence of justice: which is therefore figured with both eyes shut, and both ears open; because she should hear both sides, and respect neither. So that if we should hap to give a right judgment, it might be "justum," but not "juste," without hearing both parties.

For the point of derogation, his lordship said, he knew well we were no less ready to acknowledge than himself, that the crown of England was ever invested, amongst other prerogatives not disputable, of an absolute determination and power of concluding and making war and peace: which that it was no new dotation, but of an ancient foundation in the crown, he would recite unto us a number of precedents in the reigns of several kings, and chiefly of those kings which come nearest his majesty's own worthiness; wherein he said, that he would not put his credit upon ciphers and dates; because it was easy to mistake the year of a reign, or number of a roll, but he would avouch them in substance to be perfect and true as they are taken out of the records. By which precedents it will appear, that petitions made in parliament to kings of this realm, his majesty's progenitors, intermeddling with matter of war or peace, or inducement thereunto, receive small allowance or success, but were always put off with dilatory answers; sometimes referring the matter to their council, sometimes to their letters, sometimes to their farther pleasure and advice, and such other forms; expressing plainly, that the kings meant to reserve matter of that nature entirely to their own power and pleasure.

In the eighteenth year of King Edward I., complaint was made by the Commons, against the subjects of the Earl of Flanders, with petition of redress. The king's answer was, "Rex nihil aliud potest, quam eodem modo petere;" that is, That the king could do no more but make request to the Earl of Flanders, as request had been made to him; and yet nobody will imagine but King Edward the First was potent enough to have had his reason of a count of Flanders by a war; and yet his answer was, "Nihil aliud potest;" as giving them to understand, that the entering into a war was a matter transcendent, that must not depend upon such controversies.

In the fourteenth year of King Edward III., the Commons petitioned, that the king would enter into certain covenants and capitulations with the Duke of Brabant; in which petition there was also inserted somewhat touching a money matter. The king's answer was, That for that which concerned the moneys, they might handle it and examine it; but touching the peace, he would do as to himself seemed good.

In the eighteenth year of King Edward III., the Commons petitioned, that they might have the trial and proceeding with certain merchants strangers as enemies to the state. The king's answer was, It should remain as it did till the king had taken farther order.

In the forty-fifth year of King Edward III., the Commons complained that their trade with the Easterlings was not upon equal terms, which is one of the points insisted upon in the present petition, and prayed an alteration and reducement. The king's answer was, It shall be so as occasion shall require.

In the fiftieth year of the same king, the Commons petitioned to the king for remedy against the subjects of Spain, as they now do. The king's answer was, That he would write his letter for remedy. Here is letters of request, no letters of mart: "Nihil potest nisi eodem modo petere."

In the same year, the merchants of York petitioned in parliament against the Hollanders, and desired their ships might be stayed both in England and at Calais. The king's answer was, Let it be declared unto the king's council, and they shall have such remedy as is according to reason.

In the second year of King Richard II., the merchants of the sea-coast did complain of divers spoils upon their ships and goods by the Spaniard. The king's answer was, That with the advice of his council he would procure remedy.

His lordship cited two other precedents; the one, in the second year of King Henry IV., of a petition against the merchants of Genoa; the other, in the eleventh year of King Henry VI., of a petition against the merchants of the still-yard, which I omit, because they contain no variety of answer.

His lordship farther cited two precedents concerning other points of prerogative, which are likewise flowers of the crown; the one, touching the king's supremacy ecclesiastical, the other, touching the order of weights and measures. The former of them was in the time of King Richard II., at what time the Commons complained against certain encroachments and usurpations of the pope: and the king's answer was, "The king hath given order to his council to treat with the bishops thereof." The other was in the eighteenth year of King Edward I., at which time complaint was made against uneven weights: and the king's answer was, "Vocentur partes ad placita regis, et fiat justitia;" whereby it appeared, that the kings of this realm still used to refer causes petitioned in parliament to the proper places of cognisance and decision. But for the matter of war and peace, as appears in all the former precedents,

the kings ever kept it in "scrinio pectoris," in the shrines of their own breast, assisted and advised by their council of estate.

Inasmuch as his lordship did conclude his enumeration of precedents with a notable precedent in the seventeenth year of King Richard II., a prince of no such glory nor strength; and yet when he made offer to the Commons in parliament that they should take into their considerations matter of war and peace then in hand; the Commons, in modesty, excused themselves, and answered, "The Commons will not presume to treat of so high a charge." Out of all which precedents his lordship made this inference, that as "dies diem docet," so by these examples wise men will be admonished to forbear those petitions to princes, which are not likely to have either a welcome hearing, or an effectual answer.

And for prejudice that might come of handling and debating matter of war and peace in parliament, he doubted not, but that the wisdom of this House did conceive upon what secret considerations and motives that point did depend. For that there is no king which will providently and maturely enter into a war, but will first balance his own forces; seek to anticipate confederacies and alliances, revoke his merchants, find an opportunity of the first breach, and many other points, which, if they once do but take wind, will prove vain and frustrate. And, therefore, that this matter, which is "arcanum imperii," one of the highest mysteries of estate, must be suffered to be kept within the veil: his lordship adding, that he knew not well whether, in that which he had already said out of an extreme desire to give us satisfaction, he had not communicated more particulars than perhaps was requisite. Nevertheless, he confessed, that sometimes parliaments have been made acquainted with matter of war and peace in a generality: but it was upon one of these two motives; when the king and council conceived that either it was material to have some declaration of the zeal and affection of the people; or else when the king needed to demand moneys and aids for the charge of the wars; wherein if things did sort to war, we were sure enough to hear of it: his lordship hoping that his majesty would find in us no less readiness to support it than to persuade it.

Now, Mr. Speaker, for the last part wherein his lordship considered the petition, as it was recommended from us to the Upper House; his lordship delivered thus much from their lordships; that they would make a good construction of our desires, as those which they conceived did rather spring out of a feeling of the king's strength, and out of a feeling of the subjects' wrongs; nay, more, out of a wisdom and depth to declare our forwardness, if need were, to assist his majesty's future resolutions, which declaration might be to good use for his majesty's service, when it should be blown abroad; rather, I say, than that we did in any sort determine by this their overture, to do that wrong to his highness's supreme power, which haply might be inferred by those that were rather apt to make evil than good illations of our proceedings. And yet, that their lordships, for the reasons before made, must plainly tell us, that they neither could nor would concur with us, nor approve the course; and therefore concluded, that it would not be amiss for us, for our better contentment, to behold the conditions of the last peace with Spain, which were of a strange nature to him that duly observes them; no forces recalled out of the Low Countries; no new forces, as to voluntaries, restrained to go thither; so as the king may be in peace, and never a subject in England but may be in war: and then to think thus with ourselves, that that king, which would give no ground in making his peace, will not lose any ground, upon just provocation, to enter into an honourable war. And that in the mean time we should know thus much, that there could not be more forcible negotiation on the king's part, but blows, to procure remedy of those wrongs; nor more fair promises on the King of Spain's part, to give contentment concerning the same; and, therefore, that the event must be expected.

And thus, Mr. Speaker, have I passed over the speech of this worthy lord, whose speeches, as I have often said, in regard of his place and judgment, are extraordinary lights to this House; and have both the properties of light, that is, conducting, and comforting. And although, Mr. Speaker, a man would have thought nothing had been left to be said, yet I shall now give you account of another speech, full of excellent matter and ornaments, and without iteration: which, nevertheless, I shall report more compendiously, because I will not offer the speech that wrong, as to report it at large, when your minds percase and attentions are already wearied.

The other earl, who usually doth bear a principal part upon all important occasions, used a speech, first of preface, then of argument. In his preface he did deliver, that he was persuaded that both Houses did differ rather in credulity and belief, than in intention and desire: for it might be their lordships did not believe the information so far, but yet desired the reformation as much.

His lordship said farther, that the merchant was a state and degree of persons, not only to be respected, but to be prayed for, and graced them with the best additions; that they were the convoys of our supplies, the vents of our abundance, Neptune's almsmen, and fortune's adventurers. His lordship proceeded and said, this question was new to us, but ancient to them; assuring us, that the king did not bear in vain the device of the thistle, with the word, "Nemo me lacessit impune;" and that as the multiplying of his king-

doms maketh him feel his own power; so the multiplying of our loves and affections made him to feel our griefs.

For the arguments or reasons, they were five in number, which his lordship used for satisfying us why their lordships might not concur with us in this petition. The first was the composition of our House, which he took in the first foundation thereof to be merely democratical, consisting of knights of shires and burgesses of towns, and intended to be of those that have their residence, vocation, and employment in the places for which they serve: and therefore to have a private and local wisdom, according to that compass, and so not fit to examine or determine secrets of estate, which depend upon such variety of circumstances; and therefore added to the precedent formerly vouched, of the seventeenth of King Richard II., when the Commons disclaimed to intermeddle in matter of war and peace; that their answer was, that they would not presume to treat of so high and variable a matter. And although his lordship acknowledged that there be divers gentlemen, in the mixture of our House that are of good capacity and insight in matters of estate; yet that was the accident of the person, and not the intention of the place; and things were to be taken in the institution, not in the practice.

His lordship's second reason was, that both by philosophy and civil law, "ordinatio belli et pacis est absoluti imperii," a principal flower of the crown; which flowers ought to be so dear unto us, as we ought, if need were, to water them with our blood: for if those flowers should, by neglect, or upon facility and good affection, wither and fall, the garland would not be worth the wearing.

His lordship's third reason was, that kings did so love to imitate "primum mobile," as that they do not like to move in borrowed motions; so that in those things that they do most willingly intend, yet they endure not to be prevented by request: whereof he did allege a notable example in King Edward III., who would not hearken to the petition of his Commons, that besought him to make the Black Prince Prince of Wales: but yet, after that repulse of their petition, out of his own mere motion he created him.

His lordship's fourth reason was, that it might be some scandal to step between the king and his own virtue; and that it was the duty of subjects rather to take honours from king's servants and give them to kings, than to take honours from kings and give them to their servants: which he did very elegantly set forth in the example of Joab, who, lying at the siege of Rabbah, and finding it could not hold out, writ to David to come and take the honour of taking the town.

His lordship's last reason was, that it may cast some aspersion upon his majesty; implying, as if the king slept out the sobs of his subjects, until he was awaked with the thunderbolt of a parliament.

But his lordship's conclusion was very noble, which was with a protestation, that what civil threats, contestation, art, and argument can do, hath been used already to procure remedy in this cause; and a promise, that if reason of state did permit, as their lordships were ready to spend their breath in the pleading of that we desire, so they would be ready to spend their bloods in the execution thereof.

This was the substance of that which passed.

NOTES OF A SPEECH

CONCERNING A WAR WITH SPAIN.

That ye conceive there will be little difference in opinion, but that all will advise the king not to entertain further a treaty, wherein he hath been so manifestly and so long deluded.

That the difficulty, therefore, will be in the consequences thereof; for to the breach of treaty, doth necessarily succeed a despair of recovering the palatinate by treaty, and so the business falleth upon a war. And to that you will apply your speech, as being the point of importance, and, besides, most agreeable to your profession and place.

To a war such as may promise success, there are three things required: a just quarrel; sufficient forces and provisions; and a prudent and politic choice of the designs and actions whereby the war shall be managed.

For the quarrel, there cannot be a more just quarrel by the laws both of nature and nations, than for the recovery of the ancient patrimony of the king's children, gotten from them by an usurping sword, and an insidious treaty.

But further, that the war well considered is not for the palatinate only, but for England and Scotland; for if we stay till the Low Countrymen be ruined, and the party of the Papists within

the realm be grown too strong, England, Scotland, and Ireland are at the stake.

Neither doth it concern the state only, but our church: other kings, Papists, content themselves to maintain their religion, in their own dominions; but the kings of Spain run a course to make themselves protectors of the Popish religion, even amongst the subjects of other kings: almost like the Ottomans, that profess to plant the law of Mahomet by the sword; and so the Spaniards do of the pope's law. And, therefore, if either the king's blood, or our blood, or Christ's blood be dear unto us, the quarrel is just, and to be embraced.

For the point of sufficient forces, the balancing of the forces of these kingdoms and their allies, with Spain and their allies, you know to be a matter of great and weighty consideration; but yet to weigh them in a common understanding, for your part, you are of opinion that Spain is no such giant; or if he be a giant, it will be but like Goliath and David, for God will be on our side.

But to leave these spiritual considerations: you do not see in true discourse of peace and war, that we ought to doubt to be overmatched. To this opinion you are led by two things which lead all men; by experience, and by reason.

For experience; you do not find that for this age, take it for 100 years, there was ever any encounter between Spanish and English of importance, either by sea or land, but the English came off with the honour; witness the Lammas day, the retreat of Gaunt, the battle of Newport, and some others: but there have been some actions, both by sea and land, so memorable as scarce suffer the less to be spoken of. By sea, that of eighty-eight, when the Spaniards, putting themselves most upon their stirrups, sent forth that invincible armada which should have swallowed up England quick; the success whereof was, that although that fleet swam like mountains upon our seas, yet they did not so much as take a cock-boat of ours at sea, nor fire a cottage at land, but came through our channel, and were driven, as Sir Walter Raleigh says, by squibs, fire-boats he means, from Calais, and were soundly beaten by our ships in fight, and many of them sunk, and finally durst not return the way they came, but made a scattered perambulation, full of shipwrecks, by the Irish and Scottish seas to get home again; just according to the curse of the Scriptures, "that they came out against us one way, and fled before us seven ways." By land, who can forget the two voyages made upon the continent itself of Spain, that of Lisbon, and that of Cales, when in the former we knocked at the gates of the greatest city either of Spain or Portugal, and came off without seeing an enemy to look us in the face. And though we failed in our foundation, for that Antonio, whom we thought to replace in his kingdom, found no party at all, yet it was a true trial of the gentleness of Spain, which suffered us to go and come without any dispute. And for the latter, of Cales, it ended in victory; we ravished a principal city of wealth and strength in the high countries, sacked it, fired the Indian fleet that was in the port, and came home in triumph; and yet to this day were never put in suit for it, nor demanded reasons for our doings. You ought not to forgot the battle of Kinsale in Ireland, what time the Spanish forces were joined with the Irish, good soldiers as themselves, or better, and exceeded us far in number, and yet they were soon defeated, and their general D'Avila taken prisoner, and that war by that battle quenched and ended.

And it is worthy to be noted how much our power in those days was inferior to our present state. Then, a lady old, and owner only of England, entangled with the revolt of Ireland, and her confederates of Holland much weaker, and in no conjuncture. Now, a famous king, and strengthened with a prince of singular expectation, and in the prime of his years, owner of the entire isle of Britain, enjoying Ireland populate and quiet, and infinitely more supported by confederates of the Low Countries, Denmark, divers of the princes of Germany, and others. As for the comparison of Spain as it was then, and as it is now, you will for good respects forbear to speak; only you will say this, that Spain was then reputed to have the wisest council of Europe, and not a council that will come at the whistle of a favourite.

Another point of experience you would not speak of, if it were not that there is a wonderful erroneous observation, which walketh about, contrary to all the true account of time; and it is, that the Spaniard, where he once gets in, will seldom or never be got out again; and they give it an ill-favoured simile, which you will not name, but nothing is less true: they got footing at Brest, and some other parts in Britain, and quitted it: they had Calais, Ardes, Amiens, and were part beaten out, and part they rendered: they had Vercelles in Savoy, and fairly left it: they had the other day the Valtoline, and now have put it in deposit. What they will do at Ormus we shall see. So that, to speak truly of latter times, they have rather poached and offered at a number of enterprises, than maintained any constantly. And for Germany, in more ancient time, their great Emperor Charles, after he had Germany almost in his fist, was forced in the end to go from Isburgh, as it were in a mask by torch-light, and to quit every foot of his new acquests in Germany, which you hope likewise will be the hereditary issue of this late purchase of the Palatinate. And thus much for experience.

For reason: it hath many branches; you will but extract a few first. It is a nation thin sown of men, partly by reason of the sterility of their soil, and partly because their natives are exhaust

by so many employments in such vast territories as they possess, so that it hath been counted a kind of miracle to see together ten or twelve thousand native Spaniards in an army. And although they have at this time great numbers of miscellany soldiers in their armies and garrisons, yet, if there should be the misfortune of a battle, they are ever long about it to draw on supplies.

They tell a tale of a Spanish ambassador that was brought to see their treasury of St. Mark at Venice, and still he looked down to the ground; and being asked the reason, said, "he was looking to see whether the treasure had any root, so that, if that were spent, it would grow again; as his master's had." But, howsoever it be of their treasure, certainly their forces have scarcely any root, or at least such a root as putteth forth very poorly and slowly; whereas, there is not in the world again such a spring and seminary of military people as is England, Scotland, and Ireland; nor of seamen as is this island and the Low Countries: so as if the wars should mow them down, yet they suddenly may be supplied and come up again.

A second reason is, and it is the principal, that if we truly consider the greatness of Spain, it consisteth chiefly in their treasure, and their treasure in their Indies, and their Indies, both of them, is but an accession to such as are masters by sea; so as this axle-tree, whereupon their greatness turns, is soon cut a-two by any that shall be stronger than they at sea. So then you report yourself to their opinions, and the opinions of all men, enemies or whosoever; whether that the maritime forces of Britain and the Low Countries are not able to beat them at sea. For if that be, you see the chain is broken from shipping to Indies, from Indies to treasure, and from treasure to greatness.

The third reason, which hath some affinity with this second, is a point comfortable to hear in the state that we now are: wars are generally causes of poverty and consumption. The nature of this war, you are persuaded, will be matter of restorative and enriching; so that, if we go roundly on with supplies and provisions at the first, the war in continuance will find itself. That you do but point at this, and will not enlarge it.

Lastly, That it is not a little to be considered, that the greatness of Spain is not only distracted extremely, and therefore of less force; but built upon no very sound foundations, and therefore they have the less strength by any assured and confident confederacy. With France they are in competition for Navarre, Milan, Naples, and the Franche County of Burgundy; with the see of Rome, for Naples also; for Portugal, with the right heirs of that line; for that they have in their Low Countries, with the United Provinces; for Ormus, now, with Persia; for Valencia, with the Moors expulsed and their confederates; for the East and West Indies, with all the world. So that, if every bird had his feather, Spain would be left wonderful naked. But yet there is a greater confederation against them than by means of any of these quarrels or titles; and that is contracted by the fear that almost all nations have of their ambition, whereof men see no end. And thus much for balancing of their forces.

For the last point, which is the choice of the designs and enterprises, in which to conduct the war; you will not now speak, because you should be forced to descend to divers particulars, whereof some are of a more open, and some of a more secret nature. But that you would move the House to make a selected committee for that purpose; not to estrange the House in any sort, but to prepare things for them, giving them power and commission to call before them, and to confer with any martial men or others that are not of the House, that they shall think fit, for their advice and information: and so to give an account of the business to a general committee of the whole House.

CONSIDERATIONS

TOUCHING A WAR WITH SPAIN.

INSCRIBED TO PRINCE CHARLES,

ANNO MDCXXIV.

Your highness hath an imperial name. It was a Charles that brought the empire first into France; a Charles that brought it first into Spain; why should not Great Britain have its turn? But to lay aside all that may seem to have a show of fumes and fancies, and to speak solids: a war with Spain, if the king shall enter into it, is a mighty work: it requireth strong materials, and active motions. He that saith not so, is zealous, but not according to knowledge. But, nevertheless, Spain is no such giant, and he that thinketh Spain to be some great overmatch for this estate, assisted as it is,

and may be, is no good mintman; but takes greatness of kingdoms according to their bulk and currency, and not after their intrinsic value. Although, therefore, I had wholly sequestered my thoughts from civil affairs, yet, because it is a new case, and concerneth my country infinitely, I obtained of myself to set down, out of long continued experience in business of estate, and much conversation in books of policy and history, what I thought pertinent to this business; and in all humbleness present it to your highness: hoping that at least you will discern the strength of my affection through the weakness of my abilities: for the Spaniard hath a good proverb, "De suario si empre con la calentura;" there is no heat of affection, but is joined with some idleness of brain.

To a war are required, a just quarrel; sufficient forces and provisions; and a prudent choice of the designs. So, then, I will first justify the quarrel; secondly, balance the forces; and lastly, propound variety of designs for choice, but not advise the choice; for that were not fit for a writing of this nature; neither is it a subject within the level of my judgment; I being, in effect, a stranger to the present occurrences.

Wars, I speak not of ambitious predatory wars, are suits of appeal to the tribunal of God's justice, where there are no superiors on earth to determine the cause: and they are, as civil pleas are, plaints, or defences. There are therefore three just grounds of war with Spain: one plaint, two upon defence. Solomon saith, "A cord of three is not easily broken:" but especially when every of the lines would hold single by itself. They are these: the recovery of the Palatinate; a just fear of the subversion of our civil estate; a just fear of the subversion of our church and religion. For, in the handling of the two last grounds of war, I shall make it plain, that wars preventive upon just fears are true defensives, as well as upon actual invasions: and again, that wars defensive for religion, I speak not of rebellion, are most just: though offensive wars for religion are seldom to be approved, or never, unless they have some mixture of civil titles. But all that I shall say in this whole argument, will be but like bottoms of thread close wound up, which, with a good needle, perhaps, may be flourished into large works.

For the asserting of the justice of the quarrel, for the recovery of the Palatinate, I shall not go so high as to discuss the right of the war of Bohemia; which if it be freed from doubt on our part, then there is no colour nor shadow why the Palatinate should be retained; the ravishing whereof was a mere excursion of the first wrong, and a super injustice. But I do not take myself to be so perfect in the customs, transactions, and privileges of that kingdom of Bohemia, as to be fit to handle that part: and I will not offer at that I cannot master. Yet this I will say, in passage, positively and resolutely; that it is impossible an elective monarchy should be so free and absolute as an hereditary; no more than it is possible for a father to have so full power and interest in an adoptive son as in a natural; "quia naturalis obligatio fortior civili." And again, that received maxim is almost unshaken and infallible; "Nil magis naturæ consentaneum est, quam ut iisdem modis res dissolvantur, quibus constituuntur." So that if the part of the people or estate be somewhat in the election, you cannot make them nulls or ciphers in the privation or translation. And if it be said, that this is a dangerous opinion for the pope, emperor, and elective kings; it is true, it is a dangerous opinion, and ought to be a dangerous opinion, to such personal popes, emperors, or elective kings, as shall transcend their limits, and become tyrannical. But it is a safe and sound opinion for their sees, empires, and kingdoms; and for themselves also, if they be wise; "plenitudo potestatis est plenitudo tempestatis." But the chief cause why I do not search into this point is, because I need it not. And in handling the right of a war, I am not willing to intermix matter doubtful with that which is out of doubt. For as in capital causes, wherein but one man's life is in question, "in favorem vitæ" the evidence ought to be clear; so much more in a judgment upon a war, which is capital to thousands. I suppose therefore the worst, that the offensive war upon Bohemia had been unjust; and then make the case, which is no sooner made than resolved; if it be made not enwrapped, but plainly and perspicuously. It is this "in thesi." An offensive war is made, which is unjust in the aggressor; the prosecution and race of the war carrieth the defendant to assail and invade the ancient and indubitate patrimony of the first aggressor, who is now turned defendant; shall he sit down and not put himself in defence? Or if he be dispossessed, shall he not make a war for the recovery? No man is so poor of judgment as will affirm it. The castle of Cadmus was taken, and the city of Thebes itself invested by Phœbidas the Lacedæmonian, insidiously, and in violation of league: the process of this action drew on a re-surprise of the castle by the Thebans, a recovery of the town, and a current of the war even unto the walls of Sparta. I demand, was the defence of the city of Sparta, and the expulsion of the Thebans out of the Laconian territories, unjust? The sharing of that part of the duchy of Milan, which lieth upon the river of Adda, by the Venetians, upon contract with the French, was an ambitious and unjust purchase. This wheel set on going, did pour a war upon the Venetians with such a tempest, as Padua and Trevigi were taken from them, and all their dominions upon the continent of Italy abandoned, and they confined within the salt waters. Will any man say, that the memorable recovery and defence of Padua, when the gentle-

men of Venice, unused to the wars, out of the love of their country, became brave and martial the first day, and so likewise the re-adeption of Trevigi, and the rest of their dominions, was matter of scruple, whether just or no, because it had source from a quarrel ill begun? The war of the Duke of Urbin, nephew to Pope Julius the Second, when he made himself head of the Spanish mutineers, was as unjust as unjust might be; a support of desperate rebels; an invasion of St. Peter's patrimony, and what you will. The race of this war fell upon the loss of Urbin itself, which was the duke's undoubted right; yet, in this case, no penitentiary, though he had enjoined him never so strait penance to expiate his first offence, would have counselled him to have given over the pursuit of his right for Urbin; which, after, he prosperously re-obtained, and hath transmitted to his family yet until this day. Nothing more unjust than the invasion of the Spanish Armada in 88 upon our seas: for our land was holy land to them, they might not touch it; shall I say, therefore, that the defence of Lisbon, or Cales, afterwards, was unjust? There be thousands of examples; "utor in re non dubia exemplis non necessariis:" the reason is plain; wars are "vindictæ," revenges, reparations. But revenges are not infinite, but according to the measure of the first wrong or damage. And, therefore, when a voluntary offensive war, by the design or fortune of the war, is turned to a necessary defensive war, the scene of the tragedy is changed, and it is a new act to begin. For the particular actions of war, though they are complicate in fact, yet they are separate and distinct in right: like to cross suits in civil pleas, which are sometimes both just. But this is so clear, as needeth no farther to be insisted upon. And yet if in things so clear, it were fit to speak of more or less clear in our present cause, it is the more clear on our part, because the possession of Bohemia is settled with the emperor. For though it be true, that "non datur compensatio injuriarum;" yet were there somewhat more colour to detain the Palatinate, as in the nature of a recovery, in value or compensation, if Bohemia had been lost, or were still the stage of war. Of this, therefore, I speak no more. As for the title of proscription or forfeiture, wherein the emperor, upon the matter, hath been judge and party, and hath justiced himself, God forbid but that it should well endure an appeal to a war. For certainly the court of heaven is as well a chancery to save and debar forfeitures, as a court of common law to decide rights; and there would be work enough in Germany, Italy, and other parts, if imperial forfeitures should go for good titles.

Thus much for the first ground of war with Spain, being in the nature of a plaint for the recovery of the Palatinate: omitting here that which might be the seed of a larger discourse, and is verified by a number of examples; that whatsoever is gained by an abusive treaty, ought to be restored "in integrum:" as we see the daily experience of this in civil pleas; for the images of great things are best seen contracted into small glasses: we see, I say, that all pretorian courts, if any of the parties be entertained or laid asleep, under pretence of arbitrement or accord, and that the other party, during that time, doth cautelously get the start and advantage at common law, though it be to judgment and execution; yet the pretorian court will set back all things "in statu quo prius," no respect had to such eviction or dispossession. Lastly, let there be no mistaking; as if when I speak of a war for the recovery of the Palatinate, I meant, that it must be "in linea recta," upon that place: for look into "jus fæciale," and all examples, and it will be found to be without scruple, that after a legation "ad res repetendas," and a refusal, and a denunciation or indiction of a war, the war is no more confined to the place of the quarrel, but is left at large and to choice, as to the particular conducing designs, as opportunities and advantages shall invite.

To proceed therefore to the second ground of a war with Spain, we have set it down to be, a just fear of the subversion of our civil estate. So, then, the war is not for the Palatinate only, but for England, Scotland, Ireland, our king, our prince, our nation, all that we have. Wherein two things are to be proved: The one, that a just fear, without an actual invasion or offence, is a sufficient ground of a war, and in the nature of a true defensive: the other, that we have towards Spain cause of just fear; I say, just fear: for as the civilians do well define, that the legal fear is "justus metus qui cadit in constantem virum" in private causes: so there is "justus metus qui cadit in constantem senatum, in causa publica;" not out of umbrages, light jealousies, apprehensions afar off, but out of clear foresight of imminent danger.

Concerning the former proposition, it is good to hear what time saith. Thucydides, in his inducement to his story of the great war of Peloponnesus, sets down in plain terms, that the true cause of that war was the overgrowing greatness of the Athenians, and the fear that the Lacedæmonians stood in thereby; and doth not doubt to call it, a necessity imposed upon the Lacedæmonians of a war; which are the words of a mere defensive: adding that the other causes were but specious and popular. "Verissimam quidem, sed minime sermone celebratam, arbitror extitisse belli causam, Athenienses, magnos effectos et Lacedæmoniis formidolosos, necessitatem illis imposuisse bellandi: quæ autem propalam ferebantur utrinque causæ, istæ fuerant, &c." "The truest cause of this war, though least voiced, I conceive to have been this; that the Athenians

being grown great, to the terror of the Lacedæmonians, did impose upon them a necessity of a war: but the causes that went abroad in speech were these, &c." Sulpitius Galba, consul, when he persuaded the Romans to a preventive war, with the later Philip, King of Macedon, in regard of the great preparations which Philip had then on foot, and his designs to ruin some of the confederates of the Romans, confidently saith, that they who took that for an offensive war, understood not the state of the question. "Ignorare videmini mihi, Quirites, non, utrum bellum an pacem habeatis, vos consuli, neque enim liberum id vobis permittet Philippus, qui terra marique ingens bellum molitur, sed utrum in Macedoniam legiones transportetis, an hostem in Italiam recipiatis." "Ye seem to me, ye Romans, not to understand, that the consultation before you is not, whether you shall have war or peace, for Philip will take order you shall be no choosers, who prepareth a mighty war both by land and sea, but whether you shall transport the war into Macedon, or receive it into Italy." Antiochus, when he incited Prusias, King of Bithynia, at that time in league with the Romans, to join with him in war against them, setteth before him a just fear of the overspreading greatness of the Romans comparing it to a fire that continually took, and spread from kingdom to kingdom: "Venire Romanos ad omnia regna tollenda, ut nullum usquam orbis terrarum nisi Romanum imperium esset; Philippum et Nabin expugnatos, se tertium peti; ut quisque proximus ab oppresso sit, per omnes velut continens incendium pervasurum:" "That the Romans came to pull down all kingdoms, and to make the state of Rome a universal monarchy; that Philip and Nabis were already ruinated, and now was his turn to be assailed; so that, as every state lay next to the other that was oppressed, so the fire perpetually grazed." Wherein it is well to be noted, that towards ambitious states, which are noted to aspire to great monarchies, and to seek upon all occasions to enlarge their dominions, "crescunt argumenta justi metus;" all particular fears do grow and multiply out of the contemplation of the general courses and practice of such states. Therefore, in deliberations of war against the Turk, it hath been often, with great judgment, maintained, that Christian princes and states have always a sufficient ground of invasive war against the enemy; not for cause of religion, but upon a just fear; forasmuch as it is a fundamental law in the Turkish empire, that they may, without any other provocation, make war upon Christendom for the propagation of their law; so that there lieth upon the Christians a perpetual fear of a war, hanging over their heads, from them; and therefore they may at all times, as they think good, be upon the prevention. Demosthenes exposeth to scorn wars which are not preventive, comparing those that make them to country fellows in a fencing-school, that never ward till the blow be past: "Ut barbari pugiles dimicare solent, ita vos bellum geritis cum Philippo: ex his enim is, qui ictus est, ictui semper inhæret; quod si eum alibi verberes, illo manus transfert; ictum autem depellere, aut prospicere, neque scit neque vult." "As country fellows use to do when they play at wasters, such a kind of war do you, Athenians, make with Philip; for with them he that gets a blow straight falleth to ward, when the blow is passed; and if you strike him in another place, thither goes his hand likewise: but to put by, or foresee a blow, they neither have the skill, nor the will."

Clinias the Candian, in Plato, speaks desperately and wildly, as if there were no such thing as peace between nations; but that every nation expects but his advantage to war upon another. But yet in that excess of speech there is thus much that may have a civil construction; namely, that every state ought to stand upon its guard, and rather prevent than be prevented. His words are, "Quam rem fere vocant pacem, nudum et inane nomen est; revera autem omnibus, adversus omnes civitates, bellum sempiternum perdurat." "That which men for the most part call peace, is but a naked and empty name; but the truth is, that there is ever between all estates a secret war." I know well this speech is the objection and not the decision, and that it is after refuted; but yet, as I said before, it bears thus much of truth, that if that general malignity, and predisposition to war, which he untruly figureth to be in all nations, be produced and extended to a just fear of being oppressed, then it is no more a true peace, but a name of a peace.

As for the opinion of Iphicrates the Athenian, it demands not so much towards a war as a just fear, but rather cometh near the opinion of Clinias; as if there were ever amongst nations a brooding of a war, and that there is no sure league but impuissance to do hurt. For he, in the treaty of peace with the Lacedæmonians, speaketh plain language; telling them, there could be no true and secure peace, except the Lacedæmonians yielded to those things, which being granted, it would be no longer in their power to hurt the Athenians, though they would: and to say truth, if one mark it well, this was in all memory the main piece of wisdom, in strong and prudent counsels, to be in perpetual watch, that the states about them should neither by approach, nor by increase of dominion, nor by ruining confederates, nor by blocking of trade, nor by any the like means, have it in their power to hurt or annoy the states they serve; and whensoever any such cause did but appear, straightways to buy it out with a war, and never take up peace at credit and upon interest. It is so memorable, as it is yet as fresh as if it were done yesterday, how that triumvirate of kings, Henry the Eighth of England, Francis

the First of France, and Charles the Fifth, emperor and King of Spain, were in their times so provident, as scarce a palm of ground could be gotten by either of the three, but that the other two would be sure to do their best, to set the balance of Europe upright again. And the like diligence was used in the age before by that league, wherewith Guicciardine beginneth his story, and maketh it, as it were, the calendar of the good days of Italy, which was contracted between Ferdinando, King of Naples, Lorenzo of Medici, Potentate of Florence, and Lodovico Sforza, Duke of Milan, designed chiefly against the growing power of the Venetians; but yet so, as the confederates had a perpetual eye one upon another, that none of them should overtop. To conclude, therefore; howsoever some schoolmen, otherwise reverend men, yet fitter to guide penknives than swords, seem precisely to stand upon it, that every offensive war must be "ultio," a revenge, that presupposeth a precedent assault or injury; yet neither do they descend to this point, which we now handle, of a just fear; neither are they of authority to judge this question against all the precedents of time. For, certainly, as long as men are men, the sons, as the poets allude, of Prometheus, and not of Epimetheus, and as long as reason is reason, a just fear will be a just cause of a preventive war; but especially if it be part of the case, that there be a nation that is manifestly detected to aspire to monarchy and new acquest; then other states, assuredly, cannot be justly accused for not staying for the first blow; or for not accepting Polyphemus's courtesy, to be the last that shall be eaten up.

Nay, I observe farther, that in that passage of Plato which I cited before, and even in the tenet of that person that beareth the resolving part, and not the objecting part, a just fear is justified for a cause of an invasive war, though the same fear proceed not from the fault of the foreign state to be assailed: for it is there insinuated, that if a state, out of the distemper of their own body, do fear sedition and intestine troubles to break out amongst themselves, they may discharge their own ill humours upon a foreign war for a cure. And this kind of cure was tendered by Jasper Coligni, Admiral of France, to Charles the Ninth, the French king, when by a vive and forcible persuasion he moved him to a war upon Flanders, for the better extinguishment of the civil wars of France; but neither was that counsel prosperous; neither will I maintain that position: for I will never set politics against ethics; especially for that true ethics are but as a handmaid to divinity and religion. Surely St. Thomas, who had the largest heart of the school divines, bendeth chiefly his style against the depraved passions which reign in making wars, speaking out of St. Augustine: "Nocendi cupiditas, ulciscendi crudelitas, implacatus et implacabilis animus, feritas rebellandi, libido dominandi, et si quæ sunt similia, hæc sunt quæ in bellis jure culpantur." And the same St. Thomas in his own text, defining of the just causes of a war, doth leave it upon very general terms: "Requiritur ad bellum causa justa, ut scilicet illi, qui impugnantur, propter aliquam culpam impugnationem mereantur:" for "impugnatio culpæ" is a far more general word than "ultio injuriæ." And thus much for the first proposition, of the second ground of a war with Spain: namely, that a just fear is a just cause of a war; and that a preventive war is a true defensive.

The second or minor proposition was this; that this kingdom hath cause of just fear of overthrow from Spain. Wherein it is true, that fears are ever seen in dimmer lights than facts. And, on the other side, fears use, many times, to be represented in such an imaginary fashion, as they rather dazzle men's eyes than open them: and therefore I will speak in that manner which the subject requires; that is, probably, and moderately, and briefly. Neither will I deduce these fears to present occurrences; but point only at general grounds, leaving the rest to more secret counsels.

Is it nothing, that the crown of Spain hath enlarged the bounds thereof within this last sixscore years, much more than the Ottoman's? I speak not of matches or unions, but of arms, occupations, invasions. Granada, Naples, Milan, Portugal, the East and West Indies; all these are actual additions to that crown. They had a mind to French Britain, the lower part of Picardy, and Piedmont; but they have let fall their bit. They have, to this day, such a hovering possession of the Valtoline, as a hobby hath over a lark: and the Palatinate is in their talons: so that nothing is more manifest, than that this nation of Spain runs a race still of empire, when all other states of Christendom stand in effect at a stay. Look then a little farther into the titles whereby they have acquired, and do now hold these new portions of their crown; and you will find them of so many varieties, and such natures, to speak with due respect, as may appear to be easily minted, and such as can hardly at any time be wanting. And, therefore, so many new conquests and purchases, so many strokes of the alarm bell of fear and awaking to other nations; and the facility of the titles, which hand-over-head have served their turn, doth ring the peal so much the sharper and louder.

Shall we descend from their general disposition to enlarge their dominions, to their particular disposition and eye of appetite which they have had towards us: they have now twice sought to impatronize themselves of this kingdom of England; once by marriage with Queen Mary; and the second time by conquest in 88, when their forces by sea and land were not inferior to those they have now. And at that time in 88, the counsel

and design of Spain was by many advertisements revealed and laid open to be, that they found the war upon the Low Countries so churlish and longsome, as they grew then to a resolution, that as long as England stood in a state to succour those countries, they should but consume themselves in an endless war: and therefore there was no other way but to assail and depress England, which was as a back of steel to the Flemings. And who can warrant, I pray, that the same counsel and design will not return again? So as we are in a strange dilemma of danger: for if we suffer the Flemings to be ruined, they are our outwork, and we shall remain naked and dismantled: if we succour them strongly, as is fit, and set them upon their feet, and do not withal weaken Spain, we hazard to change the scene of the war, and turn it upon Ireland or England: like unto rheums and defluxions, which, if you apply a strong repurcussive to the place affected, and do not take away the cause of the disease, will shift and fall straightways to another joint or place. They have also twice invaded Ireland; once under the pope's banner, when they were defeated by the Lord Gray: and after in their own name, when they were defeated by the Lord Mountjoy. So as let this suffice for a taste of their disposition towards us. But it will be said, this is an almanack for the old year; since 88 all hath been well; Spain hath not assailed this kingdom, howsoever by two several invasions from us mightily provoked. It is true: but then consider, that immediately after 88, they were embroiled for a great time in the protection of the league of France, whereby they had their hands full; after being brought extreme low by their vast and continual embracements, they were enforced to be quiet that they might take breath, and do reparations upon their former wastes. But now of late, things seem to come apace to their former estate; nay, with far greater disadvantage to us; for now that they have almost continued, and, as it were, arched their dominions from Milan, by the Valtoline, and Palatinate, to the Low Countries, we see how they thirst and pant after the utter ruin of those states; having in contempt almost the German nation, and doubting little opposition, except it come from England: whereby either we must suffer the Dutch to be ruined, to our own manifest prejudice; or put it upon the hazard I spake of before, that Spain will cast at the fairest. Neither is the point of internal danger, which groweth upon us, to be forgotten; this, that the party of the Papists in England are become more knotted, both in dependence towards Spain and amongst themselves, than they have been. Wherein again comes to be remembered the case of 88: for then also it appeared by divers secret letters, that the design of Spain was, for some years, before the invasion attempted, to prepare a party in this kingdom to adhere to the foreigner at his coming. And they bragged, that they doubted not to abuse and lay asleep the queen and council of England, as to have any fear of the party of Papists here; for that they knew, they said, the state would but cast the eye and look about to see whether there were any eminent head of that party, under whom it might unite itself; and finding none worth the thinking on, the state would rest secure and take no apprehension: whereas they meant, they said, to take a course to deal with the people, and particulars by reconcilements, and confessions, and secret promises, and cared not for any head of party. And this was the true reason why, after that the seminaries began to blossom, and to make missions into England, which was about the three-and-twentieth year of Queen Elizabeth, at what time also was the first suspicion of the Spanish invasion, then, and not before, grew the sharp and severe laws to be made against the Papists. And therefore the Papists may do well to change their thanks; and whereas they thank Spain for their favours, to thank them for their perils and miseries, if they should fall upon them: for that nothing ever made their case so ill as the doubt of the greatness of Spain, which adding reason of state to matter of conscience and religion, did whet the laws against them. And this case also seemeth, in some sort, to return again at this time; except the clemency of his majesty, and the state, do superabound; as, for my part, I do wish it should; and that the proceedings towards them may rather tend to security, and providence, and point of state, than to persecution for religion. But to conclude; these things briefly touched, may serve as in a subject conjectural and future, for to represent how just cause of fear this kingdom may have towards Spain: omitting, as I said before, all present and more secret occurrences.

The third ground of a war with Spain, I have set down to be, a just fear of the subversion of our church and religion: which needeth little speech. For if this war be a defensive, as I have proved it to be, no man will doubt, that a defensive war against a foreigner for religion is lawful. Of an offensive war there is more dispute. And yet in that instance of the war for the Holy Land and sepulchre, I do wonder sometimes, that the schoolmen want words to defend that which St. Bernard wanted words to commend. But I, that in this little extract of a treatise do omit things necessary, am not to handle things unnecessary. No man, I say, will doubt, but if the pope, or King of Spain, would demand of us to forsake our religion upon pain of a war, it were as unjust a demand, as the Persians made to the Grecians of land and water; or the Ammonites to the Israelites of their right eyes. And we see all the heathen did style their defensive wars, "pro aris et focis;" placing their altars before their hearths. So that it is in vain of this to speak farther. Only this is true; that the fear of the subversion of our

religion from Spain is the more just, for that all other Catholic princes and states content and contain themselves to maintain their religion within their own dominions, and meddle not with the subjects of other states; whereas the practice of Spain hath been, both in Charles the Fifth's time, and in the time of the league in France, by war; and now with us, by conditions of treaty, to intermeddle with foreign states, and to declare themselves protectors-general of the party of Catholics, through the world. As if the crown of Spain had a little of this, that they would plant the pope's laws by arms, as the Ottomans do the law of Mahomet. Thus much concerning the first main point of justifying the quarrel, if the king shall enter into a war; for this that I have said, and all that followeth to be said, is but to show what he may do.

The second main part of that I have propounded to speak of, is the balance of forces between Spain and us. And this also tendeth to no more, but what the king may do. For what he may do is of two kinds: what he may do as just; and what he may do as possible. Of the one I have already spoken; of the other I am now to speak. I said, Spain was no such giant; and yet, if he were a giant, it will be but as it was between David and Goliath, for "God is on our side." But to leave all arguments that are supernatural, and to speak in a human and politic sense, I am led to think that Spain is no overmatch for England, by that which leadeth all men; that is, experience and reason. And with experience I will begin, for there all reason beginneth.

Is it fortune, shall we think, that, in all actions of war or arms, great and small, which have happened these many years, ever since Spain and England have had any thing to debate one with the other, the English upon all encounters have perpetually come off with honour, and the better? It is not fortune, sure; she is not so constant. There is somewhat in the nation and natural courage of the people, or some such thing. I will make a brief list of the particulars themselves in an historical truth, no ways strouted, nor made greater by language. This were a fit speech, you will say, for a general, in the head of an army, when they were going to battle: yes; and it is no less fit speech to be spoken in the head of a council, upon a deliberation of entrance into a war. Neither speak I this to disparage the Spanish nation, whom I take to be of the best soldiers in Europe; but that sorteth to our honour, if we still have had the better hand.

In the year 1578, was that famous Lammas day, which buried the reputation of Don John of Austria, himself not surviving long after. Don John being superior in forces, assisted by the Prince of Parma, Mondragon, Mansell, and other, the best commanders of Spain, confident of victory, charged the army of the States near Rimenant, bravely and furiously at the first; but after a fight maintained by the space of a whole day, was repulsed, and forced to a retreat, with great slaughter of his men; and the course of his farther enterprises was wholly arrested; and this chiefly by the prowess and virtue of the English and Scottish troops, under the conduct of Sir John Norris and Sir Robert Stuart, colonels: which troops came to the army but the day before, harassed with a long and wearisome march; and, as it is left for a memorable circumstance in all stories, the soldiers being more sensible of a little heat of the sun, than of any cold fear of death, cast away their armour and garments from them, and fought in their shirts: and, as it was generally conceived, had it not been that the Count of Bossu was slack in charging the Spaniards upon their retreat, this fight had sorted to an absolute defeat. But it was enough to chastise Don John for his insidious treaty of peace, wherewith he had abused the States at his first coming. And the fortune of the day, besides the testimony of all stories, may be the better ascribed to the service of the English and Scottish, by comparison of this charge near Rimenant, where the English and Scottish in great numbers came in action, with the like charge given by Don John half a year before at Glemblours, where the success was contrary: there being at that time in the army but a handful of English and Scottish, and they put in disarray by the horsemen of their own fellows.

The first dart of war which was thrown from Spain or Rome upon the realm of Ireland, was in the year 1580; for the design of Stukely blew over into Afric; and the attempt of Saunders and Fitz-Maurice had a spice of madness. In that year Ireland was invaded by Spanish and Italian forces, under the pope's banner, and the conduct of San Josepho, to the number of seven hundred or better, which landed at Smerwick in Kerry. A poor number it was to conquer Ireland to the pope's use; for their design was no less; but withal they brought arms for five thousand men above their own company, intending to arm so many of the rebels of Ireland. And their purpose was, to fortify in some strong place of the wild and desolate country, and there to nestle till greater succours came; they being hastened unto this enterprise upon a special reason of state, not proper to the enterprise itself; which was by the invasion of Ireland, and the noise thereof, to trouble the council of England, and to make a division of certain aids, that then were preparing from hence for the Low Countries. They chose a place where they erected a fort, which they called the Fort del Or: and from thence they bolted like beasts of the forest, sometimes into the woods and fastnesses, and sometimes back again to their den. Soon after siege was laid to the fort by the Lord Gray, then deputy, with a smaller number than those were within the fort,

venturously indeed; but haste was made to attack them before the rebels came in to them. After the siege of four days only, and two or three sallies, with loss on their part, they that should have made good the fort for some months, till new succours came from Spain, or at least from the rebels of Ireland, yielded up themselves without conditions at the end of those four days. And for that they were not in the English army enough to keep every man a prisoner, and for that also the deputy expected instantly to be assailed by the rebels; and, again, there were no barks to throw them into, and send them away by sea: they were all put to the sword; with which Queen Elizabeth was afterwards much displeased.

In the year 1582, was that memorable retreat of Gaunt; than the which there hath not been an exploit of war more celebrated. For in the true judgment of men of war, honourable retreats are no ways inferior to brave charges; as having less of fortune, more of discipline, and as much of valour. There were to the number of three hundred horse, and as many thousand foot English, commanded by Sir John Norris, charged by the Prince of Parma, coming upon them with seven thousand horse; besides that the whole army of Spaniards was ready to march on. Nevertheless, Sir John Norris maintained a retreat without disarray, by the space of some miles, part of the way champaign, unto the city of Gaunt, with less loss of men than the enemy: the Duke of Anjou, and the Prince of Orange, beholding this noble action from the walls of Gaunt, as in a theatre, with great admiration.

In the year 1585, followed the prosperous expedition of Drake and Carlile into the West Indies, in the which I set aside the taking of St. Jago and St. Domingo in Hispaniola, as surprises rather than encounters. But that of Carthagena, where the Spaniards had warning of our coming, and had put themselves in their full strength, was one of the hottest services, and most dangerous assaults that hath been known. For the access to the town was only by a neck of land, between the sea on the one part, and the harbour water or inner sea on the other; fortified clean over with a strong rampier and barricado; so as upon the ascent of our men, they had both great ordnance and small shot, that thundered and showered upon them from the rampier in front, and from the galleys that lay at sea in flank. And yet they forced the passage, and won the town, being likewise very well manned. As for the expedition of Sir Francis Drake, in the year 1587, for the destroying of the Spanish shipping and provision upon their own coast; as I cannot say that there intervened in that enterprise any sharp fight or encounter; so, nevertheless, it did strangely discover, either that Spain is very weak at home, or very slow to move; when they suffered a small fleet of English to make a hostile invasion or incursion upon their havens and roads, from Cadiz to Capa Sacra, and thence to Cascais; and to fire, sink, and carry away at the least, ten thousand ton of their great shipping, besides fifty or sixty of their smaller vessels; and that in the sight, and under the favour of their forts; and almost under the eye of their great admiral, the best commander of Spain by sea, the Marquis de Santa Cruz, without ever being disputed with by any fight of importance. I remember Drake, in the vaunting style of a soldier, would call this enterprise, the singing of the King of Spain's beard.

The enterprise of eighty-eight, deserveth to be stood upon a little more fully, being a miracle of time. There armed from Spain, in the year 1588, the greatest navy that ever swam upon the sea: for though there have been far greater fleets for number, yet for the bulk and building of the ships, with the furniture of great ordnance and provisions, never the like. The design was to make, not an invasion only, but an utter conquest of this kingdom. The number of vessels were one hundred and thirty, whereof galliasses and galleons seventy-two goodly ships, like floating towers or castles, manned with thirty thousand soldiers and marines. This navy was the preparation of five whole years, at the least: it bare itself also upon divine assistance; for it received special blessing from Pope Sixtus, and was assigned as an apostolical mission for the reducement of this kingdom to the obedience of the see of Rome. And, in farther token of this holy warfare, there were amongst the rest of these ships, twelve, called by the names of the twelve apostles. But it was truly conceived, that this kingdom of England could never be overwhelmed, except the land waters came in to the sea tides. Therefore was there also in readiness in Flanders, a mighty strong army of land forces, to the number of fifty thousand veteran soldiers, under the conduct of the Duke of Parma, the best commander, next the French king, Henry the Fourth, of his time. These were designed to join with the forces at sea; there being prepared a number of flat-bottomed boats to transport the land forces, under the wing and protection of the great navy. For they made no account, but that the navy should be absolute master of the seas. Against these forces, there were prepared on our part, to the number of near one hundred ships; not so great of bulk, indeed, but of a more nimble motion, and more serviceable: besides a less fleet of thirty ships, for the custody of the narrow seas. There were also in readiness at land two armies; besides other forces, to the number of ten thousand, dispersed amongst the coast towns in the southern parts. The two armies were appointed; one of them consisting of twenty-five thousand horse and foot, for the repulsing of the enemy at their landing; and the other of twenty-five thousand for safeguard and attendance about the court and the queen's person.

There were also other dormant musters of soldiers throughout all parts of the realm, that were put in readiness, but not drawn together. The two armies were assigned to the leading of two generals, noble persons, but both of them rather courtiers, and assured to the state, than martial men; yet lined and assisted with subordinate commanders of great experience and valour. The fortune of the war made this enterprise at first a play at base. The Spanish navy set forth out of the Groyne in May, and was dispersed and driven back by weather. Our navy set forth somewhat later out of Plymouth, and bare up towards the coast of Spain to have fought with the Spanish navy; and partly by reason of contrary winds, partly upon advertisement that the Spaniards were gone back, and upon some doubt also that they might pass by towards the coast of England, whilst we were seeking them afar off, returned likewise into Plymouth about the middle of July At that time came more confident advertisement, though false, not only to the lord admiral, but to the court, that the Spaniards could not possibly come forward that year: whereupon our navy was upon the point of disbanding, and many of our men gone ashore: at which very time the Invincible Armada, for so it was called in a Spanish ostentation, throughout Europe, was discovered upon the western coast. It was a kind of surprise; for that, as was said, many of our men were gone to land, and our ships ready to depart. Nevertheless, the admiral, with such ships only as could suddenly be put in readiness, made forth towards them; insomuch as of one hundred ships, there came scarce thirty to work. Howbeit, with them, and such as came daily in, we set upon them, and gave them the chase. But the Spaniards, for want of courage, which they called commission, declined the fight, casting themselves continually into roundels, their strongest ships walling in the rest, and in that manner, they made a flying march towards Calais. Our men by the space of five or six days followed them close, fought with them continually, made great slaughter of their men, took two of their great ships, and gave divers others of their ships their death's wounds, whereof soon after they sank and perished; and, in a word, distressed them almost in the nature of a defeat; we ourselves in the mean time receiving little or no hurt. Near Calais the Spaniards anchored, expecting their land forces, which came not. It was afterwards alleged, that the Duke of Parma did artificially delay his coming; but this was but an invention and pretension given out by the Spaniards; partly upon a Spanish envy against that duke, being an Italian, and his son a competitor to Portugal; but chiefly to save the monstrous scorn and disreputation, which they and their nation received by the success of that enterprise. Therefore their colours and excuses, forsooth, were, that their general by sea had a limited commission, not to fight until the land forces were come in to them: and that the Duke of Parma had particular reaches and ends of his own underhand, to cross the design. But it was both a strange commission, and a strange obedience to a commission; for men in the midst of their own blood, and being so furiously assailed, to hold their hands, contrary to the laws of nature and necessity. And as for the Duke of Parma, he was reasonably well tempted to be true to that enterprise, by no less promise than to be made a feudatory, or beneficiary King of England, under the seignory, in chief, of the pope, and the protection of the King of Spain. Besides, it appeared that the Duke of Parma held his place long after in the favour and trust of the King of Spain, by the great employments and services that he performed in France: and, again, it is manifest, that the duke did his best to come down and to put to sea. The truth was, that the Spanish navy, upon those proofs of fight which they had with the English, finding how much hurt they received, and how little hurt they did, by reason of the activity and low building of our ships, and skill of our seamen; and being also commanded by a general of small courage and experience, and having lost at the first two of their bravest commanders at sea, Pedro de Valdez, and Michael de Oquenda, durst not put it to a battle at sea, but set up their rest wholly upon the land enterprise. On the other side, the transporting of the land forces failed in the very foundation: for whereas the council of Spain made full account that their navy should be master of the sea, and therefore able to guard and protect the vessels of transportation; when it fell out to the contrary that the great navy was distressed, and had enough to do to save itself; and, again, that the Hollanders impounded their land forces with a brave fleet of thirty sail, excellently well appointed; things, I say, being in this state, it came to pass that the Duke of Parma must have flown if he would have come to England, for he could get neither bark nor mariner to put to sea: yet certain it is, that the duke looked still for the coming back of the Armada, even at that time when they were wandering, and making their perambulation upon the northern seas. But to return to the Armada, which we left anchored at Calais: from thence, as Sir Walter Raleigh was wont prettily to say, they were suddenly driven away with squibs; for it was no more but a stratagem of fire boats, manless, and sent upon them by the favour of the wind in the night time, that did put them in such terror, as they cut their cables, and left their anchors in the sea. After they hovered some two or three days about Graveling, and there again were beaten in a great fight; at what time our second fleet, which kept the narrow seas, was come in and joined to our main fleet. Thereupon the Spaniards entering

into farther terror, and finding also divers of their ships every day to sink, lost all courage, and instead of coming up into the Thames' mouth for London, as their design was, fled on towards the north to seek their fortunes; being still chased by the English navy at the heels, until we were fain to give them over for want of powder. The breath of Scotland the Spaniards could not endure; neither durst they as invaders land in Ireland; but only ennobled some of the coasts thereof with shipwrecks. And so going northwards aloof, as long as they had any doubt of being pursued, at last, when they were out of reach, they turned, and crossed the ocean to Spain, having lost fourscore of their ships and the greater part of their men. And this was the end of that sea-giant, the Invincible Armada: which, having not so much as fired a cottage of ours at land, nor taken a cock-boat of ours at sea, wandered through the wilderness of the northern seas; and, according to the curse in the Scripture, "came out against us one way, and fled before us seven ways;" serving only to make good the judgment of an astrologer long before given, "octogesimus octavus mirabilis annus:" or rather, to make good, even to the astonishment of all posterity, the wonderful judgments of God, poured down commonly upon vast and proud aspirings.

In the year that followed, of 1589, we gave the Spaniards no breath, but turned challengers, and invaded the main of Spain. In which enterprise, although we failed in our end, which was to settle Don Antonio in the kingdom of Portugal, yet a man shall hardly meet with an action that doth better reveal the great secret of the power of Spain; which power well sought into, will be found rather to consist in a veteran army, such as upon several occasions and pretensions they have ever had on foot, in one part or other of Christendom, now by the space of almost sixscore years, than in the strength of their dominions and provinces. For what can be more strange, or more to the disvaluation of the power of the Spaniard upon the continent than that, with an army of eleven thousand English land soldiers, and a fleet of twenty-six ships of war, besides some weak vessels for transportation, we should, within the hour-glass of two months, have won one town of importance by scalado, battered and assaulted another, overthrown great forces in the field, and that upon the disadvantage of a bridge strongly barricadoed, landed the army in three several places of his kingdom, marched seven days in the heart of his countries, lodged three nights in the suburbs of his principal city, beaten his forces into the gates thereof, possessed two of his frontier forts, and come off after all this with small loss of men, otherwise than by sickness? And it was verily thought, that had it not been for four great disfavours of that voyage, that is to say, the failing in sundry provisions that were promised, especially of cannons for battery; the vain hopes of Don Antonio, concerning the people of the country to come in to his aid; the disappointment of the fleet that was directed to come up the river of Lisbon; and, lastly, the diseases which spread in the army by reason of the heat of the season, and of the soldiers' misrule in diet, the enterprise had succeeded, and Lisbon had been carried. But howsoever it makes proof to the world, that an invasion of a few English upon Spain may have just hopes of victory, at least of passport to depart safely.

In the year 1591 was that memorable fight of an English ship called the Revenge, under the command of Sir Richard Greenvil; memorable, I say, even beyond credit, and to the height of some heroical fable: and though it were a defeat, yet it exceeded a victory; being like the act of Samson, that killed more men at his death, than he had done in the time of all his life. This ship, for the space of fifteen hours, sat like a stag among hounds at the bay, and was sieged, and fought with, in turn, by fifteen great ships of Spain, part of a navy of fifty-five ships in all; the rest, like abettors, looking on afar off. And amongst the fifteen ships that fought, the great S. Philippo was one; a ship of fifteen hundred tons, prince of the twelve sea-apostles, which was right glad when she was shifted off from the Revenge. This brave ship, the Revenge, being manned only with two hundred soldiers and mariners, whereof eighty lay sick; yet, nevertheless, after a fight maintained, as was said, of fifteen hours, and two ships of the enemy sunk by her side, besides many more torn and battered, and great slaughter of men, never came to be entered, but was taken by composition; the enemies themselves having in admiration the virtue of the commander, and the whole tragedy of that ship.

In the year 1596 was the second invasion that we made upon the main territories of Spain; prosperously achieved by that worthy and famous Robert, Earl of Essex, in concert with the noble Earl of Nottingham, that now liveth, then admiral. This journey was like lightning; for in the space of fourteen hours the King of Spain's navy was destroyed, and the town of Cadiz taken. The navy was no less than fifty tall ships, besides twenty galleys to attend them. The ships were straightways beaten, and put to flight with such terror, as the Spaniards in the end were their own executioners, and fired them all with their own hands. The galleys, by the benefit of the shores and shallows, got away. The town was a fair, strong, well built, and rich city; famous in antiquity, and now most spoken of for this disaster. It was manned with four thousand soldiers foot, and some four hundred horse; it was sacked and burned, though great clemency was used towards the inhabitants. But that which is no less strange than the sudden victory, is the great

patience of he Spaniards; who, though we stayed upon the place divers days, yet never offered us any play then, nor never put us in suit by any action of revenge or reparation at any time after.

In the year 1600 was the battle of Newport in the Low Countries, where the armies of the archduke, and the States, tried it out by a just battle. This was the only battle that was fought in those countries these many years. For battles in the French wars have been frequent, but in the wars of Flanders rare, as the nature of a defensive requireth. The forces of both armies were not much unequal: that of the States exceeded somewhat in number, but that again was recompensed in the quality of the soldiers; for those of the Spanish part were of the flower of all their forces. The archduke was the assailant, and the preventer, and had the fruit of his diligence and celerity. For he had charged certain companies of Scottish men, to the number of eight hundred, sent to make good a passage, and thereby severed from the body of the army, and cut them all in pieces: for they, like a brave infantry, when they could make no honourable retreat, and would take no dishonourable flight, made good the place with their lives. This entrance of the battle did whet the courage of the Spaniards, though it dulled their swords: so as they came proudly on, confident to defeat the whole army. The encounter of the main battle which followed, was a just encounter, not hastening to a sudden rout, nor the fortune of the day resting upon a few former ranks, but fought out to the proof by several squadrons, and not without variety of success; "Stat pedi pes densaque viro vir." There fell out an error in the Dutch army, by the overhasty medley of some of their men with the enemies, which hindered the playing of their great ordnance. But the end was that the Spaniards were utterly defeated, and near five thousand of their men in the fight, and in the execution, slain and taken; amongst whom were many of the principal persons of their army. The honour of the day was, both by the enemy and the Dutch themselves, ascribed unto the English; of whom Sir Francis Vere, in a private commentary which he wrote of that service, leaveth testified, that of fifteen hundred in number, for they were no more, eight hundred were slain in the field: and, which is almost incredible in a day of victory, of the remaining seven hundred two men only came off unhurt. Amongst the rest Sir Francis Vere himself had the principal honour of the service, unto whom the Prince of Orange, as is said, did transmit the direction of the army for that day; and in the next place Sir Horace Vere, his brother, that now liveth, who was the principal in the active part. The service also of Sir Edward Cecil, Sir John Ogle, and divers other brave gentlemen, was eminent.

In the year 1601, followed the battle of Kinsale, in Ireland. By this Spanish invasion of Ireland, which was in September that year, a man may guess how long time a Spaniard will live in Irish ground; which is a matter of a quarter of a year, or four months at most. For they had all the advantages in the world; and no man would have thought, considering the small forces employed against them, that they could have been driven out so soon. They obtained, without resistance, in the end of September, the town of Kinsale; a small garrison of one hundred and fifty English leaving the town upon the Spaniards' approach, and the townsmen receiving the foreigners as friends. The number of Spaniards that put themselves into Kinsale, was two thousand men, soldiers of old bands, under the command of Don John d'Aquila, a man of good valour. The town was strong of itself; neither wanted there any industry to fortify it on all parts, and make it tenable, according to the skill and discipline of Spanish fortification. At that time the rebels were proud, being encouraged upon former successes; for though the then deputy, the Lord Mountjoy, and Sir George Carew, President of Munster, had performed divers good services to their prejudice; yet the defeat they had given the English at Blackwater, not long before, and their treaty, too much to their honour, with the Earl of Essex, was yet fresh in their memory. The deputy lost no time, but made haste to have recovered the town before new succours came, and sat down before it in October, and laid siege to it by the space of three winter months or more: during which time sallies were made by the Spaniard, but they were beaten in with loss. In January came fresh succours from Spain, to the number of two thousand more, under the conduct of Alonzo d'Ocampo. Upon the comforts of these succours, Tyrone and Odonnell drew up their forces together, to the number of seven thousand, besides the Spanish regiments, and took the field, resolved to rescue the town, and to give the English battle. So here was the case: an army of English, of some six thousand, wasted, and tired with a long winter's siege, engaged in the midst, between an army of a greater number than themselves, fresh and in vigour, on the one side; and a town strong in fortification, and strong in men, on the other. But what was the event? This, in few words: that after the Irish and Spanish forces had come on, and showed themselves in some bravery, they were content to give the English the honour as to charge them first; and when it came to the charge, there appeared no other difference between the valour of the Irish rebels and the Spaniards, but that the one ran away before they were charged, and the other straight after. And, again, the Spaniards that were in the town had so good memories of their losses in their former sallies, as the confidence of an army, which came for their deliverance, could

not draw them forth again. To conclude: there succeeded an absolute victory for the English, with the slaughter of above two thousand of the enemy; the taking of nine ensigns, whereof six Spanish; the taking of the Spanish general, d'Ocampo, prisoner; and this with the loss of so few of the English as is scarce credible; being, as hath been rather confidently than credibly reported, but of one man, the cornet of Sir Richard Greame; though not a few hurt. There followed immediately after the defeat a present yielding up of the town by composition; and not only so, but an avoiding, by express articles of treaty accorded, of all other Spanish forces throughout all Ireland, from the places and nests where they had settled themselves in greater strength, as in regard of the natural situation of the places, than that was of Kinsale; which were Castlehaven, Baltimore, and Beerehaven. Indeed they went away with sound of trumpet, for they did nothing but publish and trumpet all the reproaches they could devise, against the Irish land and nation; insomuch as d'Aquila said in open treaty, that when the devil upon the mount did show Christ all the kingdoms of the earth, and the glory of them, he did not doubt but the devil left out Ireland, and kept it for himself.

I cease here; omitting not a few other proofs of the English valour and fortunes, in these latter times; as at the suburbs of Paris, at the Raveline, at Druse in Normandy, some encounters in Britanny, and at Ostend, and divers others; partly because some of them have not been proper encounters between the Spaniards and the English; and partly because others of them have not been of that greatness, as to have sorted in company with the particulars formerly recited. It is true, that amongst all the late adventures, the voyage of Sir Francis Drake, and Sir John Hawkins into the West Indies, was unfortunate; yet, in such sort as it doth not break or interrupt our prescription, to have had the better of the Spaniards upon all fights of late. For the disaster of that journey was caused chiefly by sickness; as might well appear by the deaths of both the generals, Sir Francis Drake, and Sir John Hawkins, of the same sickness amongst the rest. The land enterprise of Panama was an ill measured and immature counsel: for it was grounded upon a false account, that the passages towards Panama were no better fortified than Drake had left them. But yet it sorted not to any fight of importance, but to a retreat, after the English had proved the strength of their first fort, and had notice of the two other forts beyond, by which they were to have marched. It is true, that in the return of the English fleet they were set upon by Avellaneda, admiral of twenty great ships, Spanish, our fleet being but fourteen, full of sick men, deprived of their two generals by sea, and having no pretence but to journey homewards: and yet the Spaniards did but salute them, about the Cape de los Corientes, with some small offer of fight, and came off with loss; although it was such a new thing for the Spaniards to receive so little hurt upon dealing with the English, as Avellaneda made great brags of it, for no greater matter than the waiting upon the English afar off, from Cape de los Corientes to Cape Antonio; which, nevertheless, in the language of a soldier, and of a Spaniard, he called a chase.

But, before I proceed farther, it is good to meet with an objection, which if it be not removed, the conclusion of experience from the time past, to the time present, will not be sound and perfect. For it will be said, that in the former times, whereof we have spoken, Spain was not so mighty as now it is; and England, on the other side, was more aforehand in all matters of power. Therefore, let us compare with indifferency these disparities of times, and we shall plainly perceive, that they make for the advantage of England at this present time. And because we will less wander in generalities, we will fix the comparison to precise times; comparing the state of Spain and England in the year eighty-eight, with this present year that now runneth. In handling of this point, I will not meddle with any personal comparisons of the princes, counsellors, and commanders by sea or land, that were then, and that are now, in both kingdoms, Spain and England; but only rest upon real points, for the true balancing of the state of the forces and affairs of both times. And yet these personal comparisons I omit not, but that I could evidently show, that even in these personal respects the balance sways on our part; but because I would say nothing that may savour of a spirit of flattery or censure of the present government.

First, therefore, it is certain, that Spain hath not now one foot of ground in quiet possession more than it had in eighty-eight. As for the Valtoline and the Palatinate, it is a maxim in state, that all countries of new acquest, till they be settled, are rather matters of burden, than of strength. On the other side, England hath Scotland united, and Ireland reduced to obedience, and planted; which are mighty augmentations.

Secondly, in eighty-eight, the kingdom of France, able alone to counterpoise Spain itself, much more in conjunction, was torn with the party of the league, which gave law to their king, and depended wholly upon Spain. Now France is united under a valiant young king, generally obeyed if he will, himself King of Navarre as well as of France; and that is no ways taken prisoner, though he be tied in a double chain of alliance with Spain.

Thirdly, in eighty-eight, there sat in the see of Rome a fierce thundering friar, that would set all at six and seven; or at six and five, if you allude to his name: and though he would after have

turned his teeth upon Spain, yet, he was taken order with before it came to that. Now, there is ascended to the papacy, a personage, that came in by a chaste election, no ways obliged to the party of the Spaniards: a man bred in ambassages and affairs of state, that hath much of the prince, and nothing of the friar; and one, that though he loves the chair of the papacy well, yet he loveth the carpet above the chair; that is, Italy, and the liberties thereof well likewise.

Fourthly, in eighty-eight, the King of Denmark was a stranger to England, and rather inclined to Spain; now the king is incorporated to the blood of England, and engaged in the quarrel of the Palatinate. Then, also, Venice, Savoy, and the princes and cities of Germany, had but a dull fear of the greatness of Spain, upon a general apprehension only of the spreading and ambitious designs of that nation: now that fear is sharpened and pointed by the Spaniards' late enterprises upon the Valtoline, and the Palatinate, which come nearer them.

Fifthly, and lastly, the Dutch, which is the Spaniards' perpetual duellist, hath now, at this present, five ships to one, and the like proportion in treasure and wealth, to that they had in eighty-eight. Neither is it possible, whatsoever is given out, that the coffers of Spain should now be fuller than they were in eighty-eight; for, at that time, Spain had no other wars save those of the Low Countries, which were grown into an ordinary; now they have had coupled therewith the extraordinary of the Valtoline, and the Palatinate. And so I conclude my answer to the objection raised touching the difference of times; not entering into more secret passages of state, but keeping that character of style whereof Seneca speaketh, "plus significat quam loquitur."

Here I would pass over from matter of experience, were it not that I held it necessary to discover a wonderful erroneous observation that walketh about, and is commonly received, contrary to all the true account of time and experience. It is, that the Spaniard, where he once getteth in, will seldom or never be got out again. But, nothing is less true than this. Not long since they got footing at Brest, and some other parts in French Britain, and after quitted them. They had Calais, Ardes, and Amiens, and rendered them, or were beaten out. They had since Marseilles, and fairly left it. They had the other day the Valtoline, and now have put it in deposit. What they will do with Ormus, which the Persian hath taken from them, we shall see. So that, to speak truly of latter times, they have rather poached and offered at a number of enterprises, than maintained any constantly; quite contrary to that idle tradition. In more ancient times, leaving their purchases in Afric, which they after abandoned, when their great Emperor Charles had clasped Germany almost in his fist, he was forced, in the end, to go from Isburg, and, as if it had been in a mask, by torchlight, and to quit every foot in Germany round that he had gotten; which, I doubt not, will be the hereditary issue of this late purchase of the Palatinate. And so I conclude the ground that I have to think that Spain will be no overmatch to Great Britain, if his majesty should enter into a war, out of experience, and records of time.

For grounds of reason, they are many; I will extract the principal, and open them briefly, and, as it were, in the bud. For situation, I pass it over; though it be no small point: England, Scotland, Ireland, and our good confederates, the United Provinces, lie all in a plump together, not accessible but by sea, or, at least, by passing of great rivers, which are natural fortifications. As for the dominions of Spain, they are so scattered, as it yieldeth great choice of the scenes of the war, and promiseth slow succours unto such part as shall be attempted. There be three main parts of military puissance, men, money, and confederates. For men, there are to be considered valour and number. Of valour I speak not; take it from the witnesses that have been produced before: yet, the old observation is not untrue, that the Spaniard's valour lieth in the eye of the looker on; but the English valour lieth about the soldier's heart. A valour of glory, and a valour of natural courage, are two things. But let that pass, and let us speak of number: Spain is a nation thin sown of people; partly by reason of the sterility of the soil, and partly because their natives are exhausted by so many employments in such vast territories as they possess. So that it hath been accounted a kind of miracle, to see ten or twelve thousand native Spaniards in an army. And it is certain, as we have touched it, a little before, in passage, that the secret of the power of Spain consisteth in a veteran army, compounded of miscellany forces of all nations, which for many years they have had on foot upon one occasion or other: and if there should happen the misfortune of a battle, it would be a long work to draw on supplies. They tell a tale of a Spanish ambassador that was brought to see the treasury of St. Mark at Venice, and still he looked down to the ground; and being asked, why he so looked down, said, "he was looking to see whether their treasure had any root, so that, if it were spent, it would grow again; as his master's had." But, howsoever it be of their treasure, certainly their forces have scarce any root; or, at least, such a root as buddeth forth poorly and slowly. It is true they have the Walloons, who are tall soldiers, yet, that is but a spot of ground. But, on the other side, there is not in the world again such a spring and seminary of brave military people, as in England, Scotland, Ireland, and the

United Provinces: so as if wars should mow them down never so fast, yet, they may be suddenly supplied, and come up again.

For money, no doubt it is the principal part of the greatness of Spain; for by that they maintain their veteran army: and Spain is the only state of Europe that is a money grower. But in this part, of all others, is most to be considered, the ticklish and brittle state of the greatness of Spain. Their greatness consisteth in their treasure, their treasure in their Indies, and their Indies, if it be well weighed, are indeed but an accession to such as are masters by sea. So as this axle-tree, whereupon their greatness turneth, is soon cut in two by any that shall be stronger than they by sea. Herein, therefore, I refer myself to the opinions of all men, enemies, or whomsoever, whether that the maritime forces of Great Britain, and the United Provinces, be not able to beat the Spaniard at sea? For, if that be so, the links of that chain whereby they hold their greatness are dissolved. Now, if it be said, that, admit the case of Spain to be such as we have made it, yet, we ought to descend into our own case, which we shall find, perhaps, not to be in state, for treasure, to enter into a war with Spain. To which, I answer, I know no such thing; the mint beateth well; and the pulses of the people's hearts beat well. But there is another point that taketh away quite this objection: for whereas wars are generally causes of poverty or consumption; on the contrary part, the special nature of this war with Spain, if it be made by sea, is like to be a lucrative and restorative war. So that, if we go roundly on at the first, the war in continuance will find itself. And therefore you must make a great difference between Hercules' labours by land, and Jason's voyage by sea for the golden fleece.

For confederates; I will not take upon me the knowledge, how the princes, states, and councils of Europe, at this day, stand affected towards Spain; for that trencheth into the secret occurrents of the present time, wherewith, in all this treatise, I have forborne to meddle. But to speak of that which lieth open and in view; I see much matter of quarrel and jealousy, but little of amity and trust towards Spain, almost in all other estates. I see France is in competition with them for three noble portions of their monarchy, Navarre, Naples, and Milan; and now freshly in difference with them about the Valtoline. I see once in thirty or forty years cometh a pope, that casteth his eye upon the kingdom of Naples, to recover it to the church; as it was in the minds of Julius the Second, Paul the Fourth, and Sixtus the Fifth. As for that great body of Germany, I see they have greater reason to confederate themselves with the Kings of France, and Great Britain, or Denmark, for the liberty of the German nation, and for the expulsion of Spanish and foreign forces, than they had in the years 1552 and 1553. At which time they contracted a league with Henry the Second, the French king, upon the same articles, against Charles the Fifth, who had impatronized himself of a great part of Germany, through the discord of the German princes, which himself had sown and fomented: which league at that time did the deed, and drave out all the Spaniards out of that part of Germany; and reintegrated that nation in their ancient liberty and honour. For the West Indies, though Spain hath had yet not much actual disturbance there, except it have been from England; yet, nevertheless, I see all princes lay a kind of claim unto them; accounting the title of Spain but as a monopoly of those large countries, wherein they have in great part but an imaginary possession. For Afric upon the west, the Moors of Valentia expulsed, and their allies, do yet hang as a cloud or storm over Spain. Gabor on the east is like an anniversary wind, that riseth every year upon the party of Austria. And Persia hath entered into hostility with Spain, and giveth them the first blow by taking of Ormus. It is within every man's observation, also, that Venice doth think their state almost on fire, if the Spaniards hold the Valtoline. That Savoy hath learned by fresh experience, that alliance with Spain is no security against the ambition of Spain; and that of Bavaria hath likewise been taught, that merit and service doth oblige the Spaniard but from day to day. Neither do I say for all this, but that Spain may rectify much of this ill blood by their particular and cunning negotiations: but yet there it is in the body, and may break out, no man knoweth when, into ill accidents: and at least it showeth plainly, that which serveth for our purpose, that Spain is much destitute of assured and confident confederates. And, therefore, I will conclude this part with the speech of a counsellor of state in Spain at this day, which was not without salt: he said to his master, the King of Spain that now is, upon occasion; "Sir, I will tell your majesty thus much for your comfort; your majesty hath but two enemies, whereof the one is all the world, and the other is your own ministers." And thus I end the second main part I propounded to speak of; which was, the balancing of the forces between the king's majesty and the King of Spain, if a war must follow.

THE FIRST COPY OF MY DISCOURSE TOUCHING THE SAFETY OF THE QUEEN'S PERSON.*

These be the principal remedies, I could think of, for extirpating the principal cause of those conspiracies, by the breaking the nest of those fugitive traitors, and the filling them full of terror, despair, jealousy, and revolt. And it is true, I thought of some other remedies, which, because

* From the original in the Lambeth Library.

in mine own conceit I did not so well allow, I therefore do forbear to express. And so likewise I have thought, and thought again, of the means to stop and divert as well the attempts of violence as poison, in the performance and execution. But not knowing how my travel may be accepted, being the unwarranted wishes of a private man, I leave; humbly praying her majesty's pardon, if in the zeal of my simplicity I have roved at things above my aim.

THE FRAGMENTS OF A DISCOURSE, TOUCHING INTELLIGENCE, AND THE SAFETY OF THE QUEEN'S PERSON.*

The first remedy, in my poor opinion, is that against which, as I conceive, least exception can be taken, as a thing without controversy, honourable and politic; and that is reputation of good intelligence. I say not only good intelligence, but the reputation and fame thereof. For I see, that where booths are set for watching thievish places, there is no more robbing: and though no doubt the watchmen many times are asleep, or away; yet that is more than the thief knoweth; so as the empty booth is strength and safeguard enough. So, likewise, if there be sown an opinion abroad, that her majesty hath much secret intelligence, and that all is full of spies and false brethren; the fugitives will grow into such a mutual jealousy and suspicion one of another, as they will not have the confidence to conspire together, not knowing whom to trust; and thinking all practice bootless, as that which is assured to be discovered. And to this purpose, to speak reverently, as becometh me, as I do not doubt but those honourable counsellors, to whom it doth appertain, do carefully and sufficiently provide and take order that her majesty receive good intelligence; so yet, under correction, methinks it is not done with that glory and note to the world, which was in Mr. Secretary Walsingham's* time: and in this case, as was said, "opinio veritate major."

The second remedy I deliver with less assurance, as that which is more removed from the compass of mine understanding: and that is, to treat and negotiate with the King of Spain, or Archduke Ernest,† who resides in the place where these conspiracies are most forged, upon the point of the law of nations, upon which kind of points princes' enemies may with honour negotiate, viz., that, contrary to the same law of nations, and the sacred dignity of kings, and the honour of arms, certain of her majesty's subjects, if it be not thought meet to impeach any of his ministers, refuged in his dominions, have conspired and practised assassination against her majesty's person.

* From the original in the Lambeth Library.

* Who died April 6, 1590. After his death the business of secretary of state appears to be chiefly done by Mr. Robert Cecil, who was knighted by Queen Elizabeth at Theobald's, about the beginning of June, 1591, and in August following sworn of the privy council; but not actually appointed secretary of state till July 5, 1596. Birch.

† Ernest, Archduke of Austria, son of the Emperor Maximilian II., and governor of the Low Countries, upon which government he entered in June, 1594; but held it only a short time, dying February 11/21 following. It was probably in pursuance of the advice of Mr. Francis Bacon in this paper, that Queen Elizabeth sent to the Archduke in 1594, to complain of the designs which had been formed against her life by the Count de Fuentes, and Don Diego de Ibarra, and other Spanish ministers concerned in governing the Low Countries after the death of Alexander, Duke of Parma, in December, 1592, and by the English fugitives there; and to desire him to signify those facts to the King of Spain, in order that he might vindicate his own character, by punishing his ministers, and delivering up to her such fugitives as were parties in such designs. *Camdeni Annales Eliz. Reginæ*, p. 625. Edit. Lugduni Bat. 1625. Birch.

A TRUE REPORT

OF

THE DETESTABLE TREASON,

INTENDED BY

DOCTOR RODERIGO LOPEZ,

A PHYSICIAN ATTENDING UPON THE PERSON OF THE QUEEN'S MAJESTY,

WHOM HE, FOR A SUM OF MONEY, PROMISED TO BE PAID HIM BY THE KING OF SPAIN, DID UNDERTAKE TO HAVE DESTROYED BY POISON; WITH CERTAIN CIRCUMSTANCES, BOTH OF THE PLOTTING AND DETECTING OF THE SAID TREASON.

[PENNED DURING THE QUEEN'S LIFE.]

THE King of Spain having found, by the enterprise of 88, the difficulty of an invasion of England, and having also since that time embraced the matters of France, being a design of a more easy nature, and better prepared to his hand, hath of necessity for a time laid aside the prosecution of his attempts against this realm, by open forces, as knowing his means unable to wield both actions at once, as well that of England as that of France; and, therefore, casting at the fairest, hath, in a manner, bent his whole strength upon France, making, in the mean time, only a defensive war upon the Low Countries. But finding again, that the supports and aids which her majesty hath continued to the French king, are a principal impediment and retardation to his prevailing there according to his ends, he hath, now of late, by all means, projected to trouble the waters here, and to cut us out some work at home, that by practice, without diverting and employing any great forces, he might, nevertheless, divert our succours from France.

According to which purpose, he first proved to move some innovation in Scotland, not so much in hope to alienate the king from the amity of her majesty, as practising to make a party there against the king himself, whereby he should be compelled to use her majesty's forces for his assistance. Then he solicited a subject within this realm, being a person of great nobility, to rise in arms and levy war against her majesty; which practice was by the same nobleman loyally and prudently revealed. And, lastly, rather, as it is to be thought, by the instigation of our traitorous fugitives in foreign parts, and the corrupter sort of his counsellors and ministers, than of his own nature and inclination, either of himself, or his said counsellors and ministers using his name, have descended to a course against all honour, all society and humanity, odious to God and man, detested by the heathens themselves, which is, to take away the life of her majesty, (which God have in his precious custody!) by violence or poison. A matter which might be proved to be not only against all Christianity and religion, but against nature, the law of nations, the honour of arms, the civil law, the rules of morality and policy; finally, to be the most condemned, barbarous, and ferine act that can be imagined; yea, supposing the quarrels and hostility between the princes to be never so declared and so mortal, yet, were it not that it would be a very reproach unto the age, that the matter should be once disputed or called in question, it could never be defended. And, therefore, I leave it to the censure which Titus Livius giveth in the like case upon Perseus, the last King of the Macedons, afterwards overthrown, taken with his children, and led in triumph by the Romans; "Quem non justum bellum gerere regio animo, sed per omnia clandestina grassari scelera, latrociniorum ac veneficiorum, cernebant."

But to proceed: certain it is, that even about this present time there have been suborned and sent into this realm divers persons, some English, some Irish, corrupted by money and promises, and resolved and conjured by priests in confession, to have executed that most wretched and horrible fact; of which number certain have been taken, and some have suffered, and some are spared because they have with great sorrow confessed these attempts, and detested their suborners. And if I should conjecture what the reason is, why this cursed enterprise was at this time so hotly, and with such diligence pursued, I take it to be chiefly because the matters of France were ripe, and the King of Spain made himself ready to unmask himself, and to reap that in France, which he had been long in sowing, in regard that, there being like to be a divulsion in the league by the reconciliation of some of the heads to the king, the more passionate sort, being destituted by their associates, were like to cast themselves wholly into the King of Spain's arms, and to dismember some important piece of that crown; though now upon this fresh accident of receiving the king into

Paris, it is to be thought that both the worst affected of the league will submit themselves upon any tolerable conditions to their natural king, thus advanced in strength and reputation; and the King of Spain will take a second advice ere he embark himself too far in any new attempt against France. But, taking the affairs as they then stood before this accident unexpected, especially of the council of Spain, during this his supposed harvest in France, his council had reason to wish that there were no disturbance from hence, where they make account that if her majesty were removed, upon whose person God continue his extraordinary watch and providence! here would be nothing but confusion, which they do not doubt but, with some no great treasure, and forces from without, may be nourished till they can more fully intend the ruin of this state, according to their ancient malice.

But howsoever that be, amongst the number of these execrable undertakers, there was none so much built and relied upon by the great ones of the other side, as was this physician, Lopez; nor, indeed, none so dangerous: whether you consider the aptness of the instrument, or the subtlety and secrecy of those that practised with him, or the shift and evasion which he had provided for a colour of his doings, if they should happen to come into question. For, first, whereas others were to find and encounter infinite difficulties, in the very obtaining of an opportunity to execute this horrible act; and, besides, cannot but see present and most assured death before their eyes, and therefore must be, as it were, damnable votaries if they undertake it: this man, in regard of his faculty, and of his private access to her majesty, had both means to perpetrate, and means to conceal, whereby he might reap the fruit of his wicked treason without evident peril. And for his complices that practised with him, being Portuguese, and of the retinue of King Antonio, the King of Spain's mortal enemy, they were men thereby freed and discharged from suspicion, and might send letters and receive letters out of Spain without jealousy; as those which were thought to entertain intelligences there for the good of their master. And, for the evasion and mask that Lopez had prepared for this treason, if it had not been searched and sifted to the bottom, it was, that he did intend but to cozen the King of Spain, without ill meaning; somewhat in the nature of that stratagem which Parry, a most cunning and artificial traitor, had provided for himself.

Nevertheless, this matter, by the great goodness of God, falling into good hands, of those honourable and sufficient persons which dealt therein, was by their great and worthy industry so handled and followed, as this Proteus of a disguised and transformed treason did at last appear in his own likeness and colours, which were as foul and monstrous as have been known in the world. For some of her majesty's council long since entered into consideration, that the retinue of King Antonio, I mean some of them, were not unlike to hatch these kinds of treasons, in regard they were needy strangers, entered into despair of their master's fortune, and like enough to aspire to make their peace at home, by some such wicked services as these; and therefore grew to have an extraordinary vigilant eye upon them: which prudent and discreet presumption, or conjecture, joined with some advertisements of espials abroad, and some other industry, was the first cause, next under the great benediction of God, which giveth unto princes zealous counsellors, and giveth to counsellors policy, and discerning thoughts, of the revealing and discovering of these treasons, which were contrived in order and form, as hereafter is set down.

This Lopez, of nation a Portuguese, and suspected to be in sect secretly a Jew, though here he conformed himself to the rites of the Christian religion, for a long time professed physic in this land, by occasion whereof, being withal a man very observant and officious, and of a pleasing and appliable behaviour; in that regard, rather than for any great learning in his faculty, he grew known and favoured in court, and was some years since sworn physician of her majesty's household; and by her majesty's bounty, of whom he had received divers gifts of good commodity, was grown to good estate of wealth.

This man had insinuated himself greatly, in regard he was of the same nation, with the King Antonio, whose causes he pretended to solicit at the court: especially while he supposed there was any appearance of his fortune; of whom also he had obtained, as one that referred all his doings to gain, an assignation of 50,000 crowns to be levied in Portugal. But being a person wholly of a corrupt and mercenary nature, and finding his hopes cold from that part; he cast his eyes upon a more able paymaster, and secretly made offer long since of his service to the King of Spain: and accordingly gave sundry intelligences of that which passed here, and imported most for the King of Spain to know, having no small means, in regard of his continual attendance at court, nearness and access, to learn many particulars of great weight: which intelligences he maintained with Bernardine Mendoza, Antonio Vega, Roderigo Marquez, and divers others.

In the conveyance of which his intelligences, and in the making known of his disposition to do the King of Spain service, he had, amongst others, one Manuel Andrada, a Portuguese, revolted from Don Antonio to the King of Spain; one that was discovered to have practised the death of the said Don Antonio, and to have betrayed him to Bernardine Mendoza. This man coming hither, was, for the same, his practice appearing by letters intercepted, apprehended and committed to prison.

Before which time, also, there had been by good diligence intercepted other letters, whereby the said Andrada advertised Mendoza, that he had won Dr. Lopez to the king's service: but Lopez having understanding thereof, and finding means to have secret conference with Andrada before his examination, persuaded with him to take the matter upon himself, as if he had invented that advertisement touching Lopez, only to procure himself credit with Mendoza; and to make him conceive well of his industry and service. And to move him hereunto, Lopez set before Andrada, that if he did excuse him, he should have credit to work his delivery: whereas, if he did impeach him, he was not like to find any other means of favour. By which subtle persuasion Andrada, when he came to be examined, answered according to the direction and lessoning which Lopez had given him. And having thus acquitted himself of this suspicion, became suitor for Andrada's delivery, craftily suggesting, that he was to do some notable service to Don Antonio; in which his suit he accordingly prevailed. When Lopez had thus got Andrada out of prison, he was suffered to go out of the realm into Spain; in pretence, as was said, to do some service to Don Antonio; but, in truth, to continue Lopez's negotiation and intelligences with the King of Spain, which he handled so well, as at his return hither, for the comforting of the said Lopez, he brought to him from the king, besides thanks and words of encouragement, and an abrazo, which is the compliment of favour, a very good jewel, garnished with sundry stones of good value. This jewel, when Lopez had accepted, he cunningly cast with himself, that if he should offer it to her majesty first, he was assured she would not take it: next, that thereby he should lay her asleep, and make her secure of him for greater matters, according to the saying, "Fraus sibi fidem in parvis præstruit ut in magnis opprimat;" which accordingly he did, with protestations of his fidelity: and her majesty, as a princess of magnanimity, not apt to fear or suspicion, returned it to him with gracious words.

After Lopez had thus abused her majesty, and had these trials of the fidelity of Andrada, they fell in conference, the matter being first moved by Andrada, as he that came freshly out of Spain, touching the empoisoning of the queen: which Lopez, who saw that matter of intelligence, without some such particular service, would draw no great reward from the King of Spain; such as a man that was not needy, but wealthy as he was, could find any taste in, assented unto. And to that purpose procured again this Andrada to be sent over, as well to advertise and assure this matter to the King of Spain and his ministers, namely, to the Count de Fuentes, assistant to the general of the King of Spain's forces in the Low Countries, as also to capitulate and contract with him about the certainty of his reward. Andrada having received those instructions, and being furnished with money, by Lopez's procurement, from Don Antonio, about whose service his employment was believed to be, went over to Calais, where he remained to be near unto England and Flanders, having a boy that ordinarily passed to and fro between him and Lopez: by whom he did also, the better to colour his employment, write to Lopez intelligence, as it was agreed he should between him and Lopez; who bade him send such news as he should take up in the streets. From Calais he writeth to Count de Fuentes of Lopez's promise and demands. Upon the receipt of which letters, after some time taken to advertise this proposition into Spain, and to receive direction thereupon, the Count de Fuentes associated with Stephano Ibarra, secretary of the council of the wars in the Low Countries, calleth to him one Manuel Louis Tinoco, a Portuguese, who had also followed King Antonio, and of whose good devotion he had had experience, in that he had conveyed unto him two several packets, wherewith he was trusted by the King Antonio for France. Of this Louis the first received a corporal oath, with solemn ceremony, taking his hands between their hands, that he should keep secret that which should be imparted to him, and never reveal the same, though he should be apprehended and questioned here. This done, they acquaint him with the letters of Andrada, with whom they charge him to confer at Calais in his way, and to pass to Lopez into England, addressing him farther to Stephano Ferrera de Gama, and signifying unto the said Lopez withal, as from the king, that he gave no great credence to Andrada, as a person too slight to be used in a cause of so great weight: and therefore marvelled much that he heard nothing from Ferrera of this matter, from whom he had in former time been advertised in generality of Lopez's good affection to do him service. This Ferrera had been sometimes a man of great livelihood and wealth in Portugal, which he did forego in adhering to Don Antonio, and appeareth to be a man of capacity and practice; but hath some years since been secretly won to the service of the King of Spain, not travelling, nevertheless, to and fro, but residing as his lieger in England.

Manuel Louis, despatched with these instructions, and with all affectionate commendations from the count to Lopez, and with letters to Ferrera, took his journey first to Calais, where he conferred with Andrada; of whom receiving more ample information, together with a short ticket of credence to Lopez, that he was a person whom he might trust without scruple, came over into England, and first repaired to Ferrera, and acquainted him with the state of the business, who had before that time given some light unto Lopez, that he was not a stranger unto the prac-

tice between him and Andrada, wherewith, indeed, Andrada had in a sort acquainted him. And now, upon this new despatch and knowledge given to Lopez of the choice of Ferrera to continue that which Andrada had begun; he, to conform himself the better to the satisfaction of the King of Spain, and his ministers abroad, was content more fully to communicate with Ferrera, with whom, from that time forward, he meant singly and apertly to deal; and therefore cunningly forbore to speak with Manuel Louis himself; but concluded that Ferrera should be his only trunk, and all his dealings should pass through his hand, thinking thereby to have gone invisible.

Whereupon, he cast with himself, that it was not safe to use the mediation of Manuel Louis, who had been made privy to the matter, as some base carrier of letters; which letters also should be written in a cipher, not of alphabet, but of words; such as might, if they were opened, import no vehement suspicion. And, therefore, Manuel Louis was sent back with a short answer, and Lopez purveyed himself of a base fellow, a Portuguese called Gomez d'Avila, dwelling hard by Lopez's house, to convey his letters. After this messenger provided, it was agreed between Lopez and Ferrera, that letters should be sent to the Count de Fuentes, and Secretary Juarra, written and signed by Ferrera, for Lopez cautelously did forbear to write himself, but directed and indeed dictated word by word by Lopez himself. The contents thereof were, that Lopez was ready to execute that service to the king, which before had been treated, but required for his recompense the sum of 50,000 crowns, and assurance for the same.

These letters were written obscurely, as was touched, in terms of merchandise; to which obscurity when Ferrera excepted, Lopez answered, they knew his meaning by that which had passed before. Ferrera wrote also to Manuel Louis, but charged this Gomez to deliver the same letters unto him in the presence of Juarra; as also the letter to Juarra in the presence of Manuel Louis. And these letters were delivered to Gomez d'Avila to be carried to Brussels, and a passport procured, and his charges defrayed by Lopez. And Ferrera, the more to approve his industry, writ letters two several times, the one conveyed by Emanuel Pallacios, with the privity of Lopez, to Christophero Moro, a principal counsellor of the King of Spain, in Spain; signifying that Lopez was won to the King of Spain, and that he was ready to receive his commandment; and received a letter from the same Christophero Moro, in answer to one of these, which he showed unto Lopez. In the mean time Lopez, though a man, in semblance, of a heavy wit, yet indeed subtle of himself, as one trained in practice, and besides as wily as fear and covetousness could make him, thought to provide for himself, as was partly touched before, as many starting holes and evasions as he could devise, if any of these matters should come to light. And first he took his time to cast forth some general words afar off to her majesty, as asking her the question, Whether a deceiver might not be deceived? Whereof, her majesty not imagining these words tended to such end, as to warrant him colourably in this wretched conspiracy, but otherwise, of her own natural disposition bent to integrity and sincerity, uttered dislike and disallowance. Next, he thought he had wrought a great mystery in demanding the precise sum of 50,000 crowns, agreeing just with the sum of assignation or donation from Don Antonio; idly, and in that grossly imagining, that, if afterwards he should accept the same sum, he might excuse it, as made good by the King of Spain, in regard he desisted to follow and favour Don Antonio; whereupon the King of Spain was in honour tied not to see him a loser. Thirdly, in his conferences with Ferrera, when he was apposed upon the particular manner how he would poison her majesty, he purposely named unto him a syrup, knowing that her majesty never useth syrup; and therefore thinking that would prove a high point for his justification, if things should come in any question.

But all this while desirous after his prey, which he had in hope devoured, he did instantly importune Ferrera for the answering of his last despatch, finding the delay strange, and reiterating the protestations of his readiness to do the service, if he were assured of his money.

Now before the return of Gomez d'Avila into England, this Stephen Ferrera was discovered to have intelligence with the enemy; but so as the particular of his traffic and overtures appeared not, only it seemed there was great account made of that he managed: and thereupon he was committed to prison. Soon after arrived Gomez d'Avila, and brought letters only from Manuel Louis, by the name of Francisco de Thores; because, as it seemeth, the great persons on the other side had a contrary disposition to Lopez, and liked not to write by so base a messenger, but continued their course to trust and employ Manuel Louis himself, who in likelihood was retained till they might receive a full conclusion from Spain; which was not till about two months after. This Gomez was apprehended at his landing, and about him were found the letters aforesaid, written in jargon, or verbal cipher, but yet somewhat suspicious, in these words: "This bearer will tell you the price in which your pearls are esteemed, and in what resolution we rest about a little musk and amber, which I am determined to buy." Which words the said Manuel Louis afterward voluntarily confessed to be deciphered in this sort; That by the allowance of the pearls he meant, that the Count de Fuentes, and the secretary, did gladly accept the offer of Lopez to poison the queen, signified

by Ferrera's letter: and for the provision of amber and musk, it was meant that the count looked shortly for a resolution from the King of Spain concerning a matter of importance, which was for burning of the Queen's ships; and another point tending to the satisfaction of their vindictive humour.

But while the sense of this former letter rested ambiguous, and that no direct particular was confessed by Ferrera, nor sufficient light given to ground any rigorous examination of him, cometh over Manuel Louis with the resolution from Spain; who first understanding of Ferrera's restraint, and therefore doubting how far things were discovered, to shadow the matter, like a cunning companion, gave advertisement of an intent he had to do service, and hereupon obtained a passport: but after his coming in, he made no haste to reveal any thing, but thought to dally and abuse in some other sort. And while the light was thus in the clouds, there was also intercepted a little ticket which Ferrera in prison had found means to write, in care to conceal Lopez, and to keep him out of danger, to give a caveat of staying all farther answers and advertisements in these causes. Whereupon, Lopez was first called in question.

But, in conclusion, this matter being with all assiduity and policy more and more pierced and mined into, first, there was won from Manuel Louis his letters from the Count de Fuentes and Secretary Juarra to Ferrera, in both which mention is made of the queen's death; in that of the count's, under the term of a commission; and in that of the secretary's, under the term of the great service, whereof should arise a universal benefit to the whole world. Also, the letters of credit written by Gonsalo Gomez, one to Pedro de Carrera, and the other to Juan Pallacio, to take up a sum of money by Manuel Louis, by the foresaid false name of Fr. de Thores; letters so large, and in a manner without limitation, as any sum by virtue thereof might be taken up: which letters were delivered to Louis by the Count de Fuentes's own hands, with directions to show them to Lopez for his assurance; a matter of God's secret working in staying the same, for thereupon rested only the execution of the fact of Lopez. Upon so narrow a point consisted the safety of her majesty's life, already sold by avarice to malice and ambition, but extraordinarily preserved by that watchman which never slumbereth. This same Manuel Louis, and Stephen Ferrera also, whereof the one managed the matter abroad, and the other resided here to give correspondence, never meeting after Manuel had returned, severally examined without torture or threatening, did in the end voluntarily and clearly confess the matters abovementioned, and in their confessions fully consent and concur, not only in substance, but in all points, particularities, and circumstances; which confessions appear expressed in their own natural language, testified and subscribed with their own hands; and in open assembly, at the arraignment of Lopez in the Guildhall, were by them confirmed and avouched to Lopez his face; and therewithal are extant, undefaced, the original letters from Count de Fuentes, Secretary Juarra, and the rest.

And Lopez himself, at his first apprehension and examination, did indeed deny, and deny with deep and terrible oaths and execrations, the very conferences and treaties with Ferrera, or Andrada, about the empoisonment. And being demanded, if they were proved against him what he would say? he answered, That he would yield himself guilty of the fact intended. Nevertheless, being afterwards confronted by Ferrera, who constantly maintained to him all that he had said, reducing him to the times and places of the said conferences, he confessed the matter, as by his confession in writing, signed with his own hand, appeareth. But then he fell to that slender evasion, as his last refuge, that he meant only to cozen the King of Spain of the money: and in that he continued at his arraignment, when, notwithstanding, at the first he did retract his own confession: and yet being asked, whether he was drawn, either by means of torture, or promise of life, to make the same confession? he did openly testify that no such means were used towards him.

But the falsehood of this excuse, being an allegation that any traitor may use and provide for himself, is convicted by three notable proofs. The first, that he never opened this matter, neither unto her majesty, unto whom he had ordinary access, nor to any counsellor of state, to have permission to toll on, and inveigle these parties with whom he did treat, if it had been thought so convenient; wherein, percase, he had opportunity to have done some good service, for the farther discovery of their secret machinations against her majesty's life. The second, that he came too late to this shift; having first bewrayed his guilty conscience, in denying those treaties and conferences till they were evidently and manifestly proved to his face. The third, that in conferring with Ferrera about the manner of his assurance, he thought it better to have the money in the hands of such merchants as he should name in Antwerp, than to have it brought into England; declaring his purpose to be, after the fact done, speedily to fly to Antwerp, and there to tarry some time, and so to convey himself to Constantinople; where it is affirmed, that Don Salomon, a Jew in good credit, is Lopez his near kinsman, and that he is greatly favoured by the said Don Salomon: whereby it is evident that Lopez had cast his reckonings upon the supposition of the fact done.

Thus may appear, both how justly this Lopez*

* Lopez was executed 7th June, 1594.

is condemned for the highest treason that can be imagined; and, how, by God's marvellous goodness, her majesty hath been preserved. And, surely, if a man do truly consider, it is hard to say, whether God hath done greater things by her majesty or for her: if you observe on the one side, how God hath ordained her government to break and cross the unjust ambition of the two mighty potentates, the King of Spain and the Bishop of Rome, never so straitly between themselves combined: and, on the other side, how mightily God hath protected her, both against foreign invasion and inward troubles, and singularly against the many secret conspiracies that have been made against her life; thereby declaring to the world that he will indeed preserve that instrument which he hath magnified. But the corruptions of these times are wonderful, when that wars, which are the highest trials of right between princes, that acknowledge no superior jurisdiction, and ought to be prosecuted with all honour, shall be stained and infamed with such foul and inhuman practices. Wherein if so great a king hath been named, the rule of the civil law, which is a rule of common reason, must be remembered; "Frustra legis auxilium implorat, qui in legem committit." He that hath sought to violate the majesty royal, in the highest degree, cannot claim the pre-eminence thereof to be exempted from just imputation.

TRACTS RELATING TO ENGLAND.

OF THE

TRUE GREATNESS

OF THE

KINGDOM OF BRITAIN.

TO KING JAMES.

—Fortunatos nimium sua si bona norint.

THE greatness of kingdoms and dominions in bulk and territory doth fall under measure and demonstration that cannot err: but the just measure and estimate of the forces and power of an estate is a matter, than the which there is nothing among civil affairs more subject to error, nor that error more subject to perilous consequence. For hence may proceed many inconsiderate attempts, and insolent provocations in states that have too high an imagination of their own forces: and hence may proceed, on the other side, a toleration of many fair grievances and indignities, and a loss of many opportunities, in states that are not sensible enough of their own strength. Therefore, that it may the better appear what greatness your majesty hath obtained of God, and what greatness this island hath obtained by you, and what greatness it is, that by the gracious pleasure of Almighty God you shall leave and transmit to your children and generations as the first founder; I have thought good, as far as I can comprehend, to make a true survey and representation of the greatness of this your kingdom of Britain; being for mine own part persuaded, that the supposed prediction, "Video solem orientem in occidente," may be no less a true vision applied to Britain, than to any other kingdom of Europe; and being out of doubt that none of the great monarchies, which in the memory of times have risen in the habitable world, had so fair seeds and beginnings as hath this your estate and kingdom, whatsoever the event shall be, which must depend upon the dispensation of God's will and providence, and his blessing upon your descendants. And because I have no purpose vainly or assentatorily to represent this greatness, as in water, which shows things bigger than they are, but rather, as by an instrument of art, helping the sense to take a true magnitude and dimension: therefore, I will use no hidden order, which is fitter for insinuations than sound proofs, but a clear and open order. First, by confuting the errors, or rather correcting the excesses of certain immoderate opinions, which ascribe too much to some points of greatness, which are not so essential, and by reducing those points to a true value and estimation: then by propounding and confirming those other points of greatness which are more solid and principal, though in popular discourse less observed: and incidently by making a brief application, in both these parts, of the general principles and positions of policy unto the state and condition of these your kingdoms. Of these the former part will branch itself into these articles.

First, That in the measuring or balancing of greatness, there is commonly too much ascribed to largeness of territory.

Secondly, That there is too much ascribed to treasure or riches.

Thirdly, That there is too much ascribed to the fruitfulness of the soil, or affluence of commodities.

And, fourthly, That there is too much ascribed to the strength and fortification of towns or holds.

The latter will fall into this distribution:

First, That true greatness doth require a fit situation of the place or region.

Secondly, That true greatness consisteth essentially in population and breed of men.

Thirdly, That it consisteth also in the valour and military disposition of the people it breedeth: and in this, that they make profession of arms.

Fourthly, That it consisteth in this point, that every common subject by the poll be fit to make a soldier, and not only certain conditions or degrees of men.

Fifthly, That it consisteth in the temper of the government fit to keep the subjects in good heart and courage, and not to keep them in the condition of servile vassals.

And, sixthly, That it consisteth in the commandment of the sea.

And let no man so much forget the subject propounded, as to find strange, that here is no mention of religion, laws, or policy. For we speak of that which is proper to the amplitude and growth of states, and not of that which is common to their preservation, happiness, and all other points of well-being. First, therefore, touching largeness of territories, the true greatness of kingdoms upon earth is not without some analogy with the kingdom of heaven, as our Saviour describes it; which he doth resemble, not to any great kernel or nut, but to one of the least grains; but yet such a one, as hath a property to grow and spread. For as for large countries and multitude of provinces, they are many times rather matters of burden than of strength, as may manifestly appear both by reason and example. By reason thus. There be two manners of securing of large territories, the one by the natural arms of every province, and the other by the protecting arms of the principal estate, in which case commonly the provincials are held disarmed. So are there two dangers incident unto every estate, foreign invasion, and inward rebellion. Now, such is the nature of things, that these two remedies of estate do fall respectively into these two dangers, in case of remote provinces. For if such an estate rest upon the natural arms of the provinces, it is sure to be subject to rebellion or revolt; if upon protecting arms, it is sure to be weak against invasion: neither can this be avoided.

Now, for examples, proving the weakness of states possessed of large territories, I will use only two, eminent and selected. The first shall be of the kingdom of Persia, which extended from Egypt, inclusive, unto Bactria, and the borders of the East India; and yet, nevertheless, was overrun and conquered, in the space of seven years, by a nation not much bigger than this isle of Britain, and newly grown into name, having been utterly obscure till the time of Philip, the son of Amyntas. Neither was this effected by any rare or heroical prowess in the conqueror, as is vulgarly conceived, for that Alexander the Great goeth now for one of the wonders of the world; for those that have made a judgment grounded upon reason of estate, do find that conceit to be merely popular; for so Livy pronounceth of him, "Nihil aliud quam bene ausus vana contemnere." Wherein he judgeth of vastness of territory as a vanity that may astonish a weak mind, but no ways trouble a sound resolution. And those that are conversant attentively in the histories of those times, shall find that this purchase which Alexander made and compassed, was offered by fortune twice before to others, though by accident they went not through with it; namely, to Agesilaus, and Jason of Thessaly: for Agesilaus, after he had made himself master of most of the low provinces of Asia, and had both design and commission to invade the higher countries, was diverted and called home upon a war excited against his country by the states of Athens and Thebes, being incensed by their orators and counsellors, which were bribed and corrupted from Persia, as Agesilaus himself avouched pleasantly, when he said, That a hundred thousand archers of the King of Persia had driven him home: understanding it, because an archer was the stamp upon the Persian coin of gold. And Jason of Thessaly, being a man born to no greatness, but one that made a fortune of himself, and had obtained by his own vivacity of spirit, joined with the opportunities of time, a great army, compounded of voluntaries and adventurers, to the terror of all Græcia, that continually expected where that cloud would fall; disclosed himself in the end, that his design was for an expedition into Persia, the same which Alexander, not many years after achieved, wherein he was interrupted by a private conspiracy against his life, which took effect. So that it appeareth, as was said, that it was not any miracle of accident that raised the Macedonian monarchy, but only the weak composition of that vast state of Persia, which was prepared for a prey to the first resolute invader.

The second example that I will produce, is of the Roman empire, which had received no diminution in territory, though great in virtue and forces, till the time of Jovianus. For so it was alleged by such as opposed themselves to the rendering Nisibis upon the dishonourable retreat of the Roman army out of Persia. At which time it was avouched, that the Romans, by the space of eight hundred years, had never, before that day, made any cession or renunciation to any part of their territory, whereof they had once had a constant and quiet possession. And yet, nevertheless, immediately after the short reign of Jovianus, and towards the end of the joint reign of Valentinianus and Valens, which were his immediate successors, and much more in the times succeeding, the Roman empire, notwithstanding the magnitude thereof, became no better than a carcase, whereupon all the vultures and birds of prey of the world did seize and ravine for many ages, for a perpetual monument of the essential difference between the scale of miles, and the scale of forces. And, therefore, upon these reasons and examples, we may safely conclude, that largeness of territory is so far from being a thing inseparable from greatness of power, as it is

many times contrariant and incompatible with the same. But to make a reduction of that error to a truth, it will stand thus, that then greatness of territory addeth strength, when it hath these four conditions:

First, That the territories be compacted, and not dispersed.

Secondly, That the region which is the heart and seat of the state, be sufficient to support those parts, which are but provinces and additions.

Thirdly, That the arms or martial virtue of the state be in some degree answerable to the greatness of dominion.

And, lastly, That no part or province of the state be utterly unprofitable, but do confer some use or service to the state.

The first of these is manifestly true, and scarcely needeth any explication. For if there be a state that consisteth of scattered points instead of lines, and slender lines instead of latitudes, it can never be solid, and in the solid figure is strength. But what speak we of mathematical principles? The reason of state is evident, that if the parts of an estate be disjoined and remote, and so be interrupted with the provinces of another sovereignty; they cannot possibly have ready succours in case of invasion, nor ready suppression in case of rebellion, nor ready recovery, in case of loss or alienation by either of both means. And, therefore, we see what an endless work the King of Spain hath had to recover the Low Countries, although it were to him patrimony and not purchase; and that chiefly in regard of the great distance. So we see that our nation kept Calais a hundred years space after it lost the rest of France, in regard of the near situation; and yet in the end they that were nearer carried it by surprise, and overran succour.

Therefore Titus Quintius made a good comparison of the state of the Achaians to a tortoise, which is safe when it is retired within the shell, but if any part be put forth, then the part exposed endangereth all the rest. For so it is with states that have provinces dispersed, the defence whereof doth commonly consume and decay, and sometimes ruin the rest of the estate. And so, likewise, we may observe, that all the great monarchies, the Persians, the Romans, and the like of the Turks, they had not any provinces to the which they needed to demand access through the country of another: neither had they any long races or narrow angles of territory, which were environed or clasped in with foreign states; but their dominions were continued and entire, and had thickness and squareness in their orb or contents. But these things are without contradiction.

For the second, concerning the proportion between the principal region, and those which are but secondary, there must evermore distinction be made between the body or stem of the tree, and the boughs and branches. For if the top be over great, and the stalk too slender, there can be no strength. Now, the body is to be accounted so much of an estate, as is not separated or distinguished with any mark of foreigners, but is united specially with the bond of naturalization; and therefore we see that when the state of Rome grew great, they were enforced to naturalize the Latins or Italians, because the Roman stem could not bear the provinces and Italy both as branches: and the like they were contented after to do to most of the Gauls. So, on the contrary part, we see in the state of Lacedæmon, which was nice in that point, and would not admit their confederates to be incorporate with them, but rested upon the natural-born subjects of Sparta, how that a small time after they had embraced a larger empire, they were presently surcharged, in respect to the slenderness of the stem. For so in the defection of the Thebans and the rest against them, one of the principal revolters spake most aptly, and with great efficacy in the assembly of the associates, telling them, That the state of Sparta was like a river, which, after that it had run a great way, and taken other rivers and streams into it, ran strong and mighty, but about the head and fountain of it was shallow and weak; and therefore advised them to assail and invade the main of Sparta, knowing they should there find weak resistance either of towns or in the field: of towns, because upon confidence of their greatness they fortified not upon the main; in the field, because their people was exhaust by garrisons and services far off. Which counsel proved sound, to the astonishment of all Græcia at that time.

For the third, concerning the proportion of the military forces of a state to the amplitude of empire, it cannot be better demonstrated than by the two first examples which we produced of the weakness of large territory, if they be compared within themselves according to difference of time. For Persia at a time was strengthened with large territory, and at another time weakened; and so was Rome. For while they flourished in arms, the largeness of territory was a strength to them, and added forces, added treasures, added reputation: but when they decayed in arms, then greatness became a burden. For their protecting forces did corrupt, supplant, and enervate the natural and proper forces of all their provinces, which relied and depended upon the succours and directions of the state above. And when that waxed impotent and slothful, then the whole state laboured with her own magnitude, and in the end fell with her own weight. And that, no question, was the reason of the strange inundations of people which both from the east and north-west overwhelmed the Roman empire in one age of the world, which a man upon the sudden would attribute to some constellation or fatal revolution

of time, being indeed nothing else but the declination of the Roman empire, which, having effeminated and made vile the natural strength of the provinces, and not being able to supply it by the strength imperial and sovereign, did, as a lure cast abroad, invite and entice all the nations adjacent, to make their fortunes upon her decays. And by the same reason, there cannot but ensue a dissolution to the state of the Turk, in regard of the largeness of empire, whensoever their martial virtue and discipline shall be further relaxed, whereof the time seemeth to approach. For certainly like as great stature in a natural body is some advantage in youth, but is but burden in age; so it is with great territory, which when a state beginneth to decline, doth make it stoop and buckle so much the faster.

For the fourth and last, it is true, that there is to be required and expected, as in the parts of a body, so in the members of a state, rather propriety of service, than equality of benefit. Some provinces are more wealthy, some more populous, and some more warlike; some situated aptly for the excluding or expulsing of foreigners, and some for the annoying and bridling of suspected and tumultuous subjects; some are profitable in present, and some may be converted and improved to profit by plantations and good policy. And, therefore, true consideration of estate can hardly find what to reject, in matter of territory, in any empire, except it be some glorious acquests obtained some time in the bravery of wars, which cannot be kept without excessive charge and trouble; of which kind were the purchases of King Henry VIII., that of Tournay; and that of Bologne; and of the same kind are infinite other the like examples almost in every war, which for the most part upon treaties of peace are restored.

Thus have we now defined where the largeness of territory addeth true greatness, and where not. The application of these positions unto the particular or supposition of this your majesty's kingdom of Britain, requireth few words. For, as I professed in the beginning, I mean not to blazon or amplify, but only to observe and express matter.

First, Your majesty's dominion and empire comprehendeth all the islands of the north-west ocean, where it is open, until you come to the imbarred or frozen sea, towards Iceland; in all which tract it hath no intermixture or interposition of any foreign land, but only of the sea, whereof you are also absolutely master.

Secondly, The quantity and content of these countries is far greater than have been the principal or fundamental regions of the greatest monarchies, greater than Persia proper, greater than Macedon, greater than Italy. So as here is potentially body and stem enough for Nabuchodonosor's tree, if God should have so ordained.

Thirdly, The prowess and valour of your subjects is able to master and wield far more territory than falleth to their lot. But that followeth to be spoken of in the proper place

And, lastly, it must be confessed, that whatsoever part of your countries and regions shall be counted the meanest, yet is not inferior to those countries and regions, the people whereof some ages since overran the world. We see further by the uniting of the continent of this island, and the shutting up of the postern as it was not unfitly termed, all entrance of foreigners is excluded: and we see again, that by the fit situation and configuration of the north of Scotland toward the north of Ireland, and the reputation, commodity, and terror thereof, what good effects have ensued for the better quieting of the troubles of Ireland. And so we conclude this first branch touching largeness of territory.

The second article was,

That there is too much ascribed to treasure or riches in the balancing of greatness.

Wherein no man can be ignorant of the idolatry that is generally committed in these degenerate times to money, as if it could do all things public and private: but leaving popular errors, this is likewise to be examined by reason and examples, and such reason as is no new conceit or invention, but hath formerly been discerned by the sounder sort of judgments. For we see that Solon, who was no contemplative wise man, but a statesman and a lawgiver, used a memorable censure to Crœsus, when he showed him great treasures, and store of gold and silver that he had gathered, telling him, that whensoever another should come that had better iron than he, he would be master of all his gold and silver. Neither is the authority of Machiavel to be despised, specially in a matter whereof he saw the evident experience before his eyes, in his own times and country, who derideth the received and current opinion and principle of estate taken first from a speech of Mutianus, the lieutenant of Vespasian, That money was the sinews of war; affirming, that it is a mockery, and that there are no other true sinews of war, but the sinews and muscles of men's arms: and that there never was any war, wherein the more valiant people had to deal with the more wealthy, but that the war, if it were well conducted, did nourish and pay itself. And had he not reason so to think, when he saw a needy and ill-provided army of the French, though needy rather by negligence, than want of means, as the French manner oftentimes is, make their passage only by the reputation of their swords by their sides undrawn, through the whole length of Italy, at that time abounding in wealth after a long peace, and that without resistance, and to seize and leave what countries and places it pleased them? But it was not the experience of that time alone, but the records of all times that do concur to falsify that conceit, that wars are

decided not by the sharpest sword, but by the greatest purse. And that very text or saying of Mutianus which was the original of this opinion, is misvouched, for his speech was, "Pecuniæ sunt nervi belli civilis," which is true, for that civil wars cannot be between people of differing valour; and, again, because in them men are as oft bought as vanquished. But in case of foreign wars, you shall scarcely find any of the great monarchies of the world, but have had their foundations in poverty and contemptible beginnings, being in that point also conform to the heavenly kingdom, of which it is pronounced, "Regnum Dei non venit cum observatione." Persia, a mountainous country, and a poor people in comparison of the Medes and other provinces which they subdued. The state of Sparta, a state wherein poverty was enacted by law and ordinance; all use of gold and silver and rich furniture being interdicted. The state of Macedonia, a state mercenary and ignoble until the time of Philip. The state of Rome, a state that had poor and pastoral beginnings. The state of the Turks, which hath been since the terror of the world, founded upon a transmigration of some bands of Sarmatian Scythes, that descended in a vagabond manner upon the province that is now termed Turcomania; out of the remnants whereof, after great variety of fortune, sprang the Ottoman family. But never was any position of estate so visibly and substantially confirmed as this, touching the pre-eminence, yea, and predominancy of valour above treasure, as by the two descents and inundations of necessitous and indigent people, the one from the east, and the other from the west, that of the Arabians or Saracens, and that of the Goths, Vandals, and the rest: who, as if they had been the true inheritors of the Roman empire, then dying, or at least grown impotent and aged, entered upon Egypt, Asia, Græcia, Afric, Spain, France, coming to these nations, not as to a prey, but as to a patrimony; not returning with spoil, but seating and planting themselves in a number of provinces, which continue their progeny, and bear their names till this day. And all these men had no other wealth but their adventures, nor no other title but their swords, nor no other press but their poverty. For it was not with most of these people as it is in countries reduced to a regular civility, that no man almost marrieth except he see he have means to live; but population went on, howsoever sustentation followed, and taught by necessity, as some writers report, when they found themselves surcharged with people, they divided their inhabitants into three parts, and one third, as the lot fell, was sent abroad and left to their adventures. Neither is the reason much unlike, though the effect hath not followed in regard of a special diversion, in the nation of the Swisses, inhabiting a country, which in regard of the mountainous situation, and the popular estate, doth generate faster than it can sustain. In which people it well appeared what an authority iron hath over gold at the battle of Granson, at what time one of the principal jewels of Burgundy was sold for twelve pence, by a poor Swiss, that knew no more a precious stone than did Æsop's cock. And although this people have made no plantations with their arms, yet we see the reputation of them such, as not only their forces have been employed and waged, but their alliance sought and purchased, by the greatest kings and states of Europe. So as though fortune, as it fares sometimes with princes to their servants, hath denied them a grant of lands, yet she hath granted them liberal pensions, which are made memorable and renowned to all posterity, by the event which ensued to Louis the Twelfth; who, being pressed uncivilly by message from them for the enhancing their pensions, entered into choler, and broke out in these words, "What! will these villains of the mountains put a tax upon me?" which words cost him his Duchy of Milan, and utterly ruined his affairs in Italy. Neither were it indeed possible at this day, that that nation should subsist without descents and impressions upon their neighbours, were it not for the great utterance of people which they make into the services of foreign princes and estates, thereby discharging not only number, but in that number such spirits as are most stirring and turbulent.

And, therefore, we may conclude, that as largeness of territory, severed from military virtue, is but a burden; so, that treasure and riches severed from the same, is but a prey. It resteth therefore to make reduction of this error also unto a truth by distinction and limitation, which will be in this manner:

Treasure and moneys do then add true greatness and strength to a state, when they are accompanied with these three conditions:

First, The same condition which hath been annexed to largeness of territory, that is, that they be joined with martial powers and valour.

Secondly, That treasure doth then advance greatness, when it is rather in mediocrity than in great abundance. And again better, when some part of the state is poor, than when all parts of it are rich.

And, lastly, That treasure in a state is more or less serviceable, as the hands are in which the wealth chiefly resteth.

For the first of these, it is a thing that cannot be denied, that in equality of valour the better purse is an advantage. For like, as in wrestling between man and man, if there be a great overmatch in strength, it is to little purpose though one have the better breath; but, if the strength be near equal, then he that is shorter winded will, if the wager consist of many falls, in the end have

the worst; so it is in the wars, if it be a match between a valiant people and a cowardly, the advantage of treasure will not serve; but if they be near in valour, then the better moneyed state will be the better able to continue the war, and so in the end to prevail. But if any man think that money can make those provisions at the first encounters, that no difference of valour can countervail, let him look back but into those examples which have been brought, and he must confess, that all those furnitures whatsoever are but shows and mummeries, and cannot shroud fear against resolution. For there shall he find companies armed with armour of proof, taken out of the stately armories of kings who spared no cost, overthrown by men armed by private bargain and chance as they could get it: there shall he find armies appointed with horses bred of purpose, and in choice races, chariots of war, elephants, and the like terrors, mastered by armies meanly appointed. So of towns strongly fortified, basely yielded, and the like; all being but sheep in a lion's skin, where valour faileth.

For the second point, that competency of treasure is better than surfeit, is a matter of common place or ordinary discourse; in regard that excess of riches, neither in public nor private, ever hath any good effects, but maketh men either slothful and effeminate, and so no enterprisers; or insolent and arrogant, and so overgreat embracers; but most generally cowardly and fearful to lose, according to the adage, "Timidus Plutus;" so as this needeth no further speech. But a part of that assertion requireth a more deep consideration, being a matter not so familiar, but yet most assuredly true. For it is necessary in a state that shall grow and enlarge, that there be that composition which the poet speaks of, "Multis utile bellum;" an ill condition of a state, no question, if it be meant of a civil war, as it was spoken; but a condition proper to a state that shall increase, if it be taken of a foreign war. For except there be a spur in the state, that shall excite and prick them on to the wars, they will but keep their own, and seek no further. And in all experience, and stories, you shall find but three things that prepare and dispose an estate to war; the ambition of governors, a state of soldiers professed, and the hard means to live of many subjects. Whereof the last is the most forcible and the most constant. And this is the true reason of that event which we observed and rehearsed before, that most of the great kingdoms of the world have sprung out of hardness and scarceness of means, as the strongest herbs out of the barrenest soils.

For the third point, concerning the placing and distributing of treasure in a state, the position is simple; that, then treasure is greatest strength to a state, when it is so disposed, as it is readiest and easiest to come by for public service and use; which one position doth infer three conclusions

First, that there be quantity sufficient of treasure, as well in the treasury of the crown or state, as in the purse of the private subject.

Secondly, that the wealth of the subjects be rather in many hands than in few.

And, thirdly, that it be in those hands, where there is likest to be the greatest sparing, and increase, and not in those hands, wherein there useth to be greatest expense and consumption.

For it is not the abundance of treasure in the subjects' hands that can make sudden supply of the want of a state; because, reason tells us, and experience both, that private persons have least will to contribute when they have most cause; for when there is noise or expectation of wars, then is always the deadest times for moneys, in regard every man restraineth and holdeth fast his means for his own comfort and succour, according as Solomon saith, The riches of a man are as a stronghold in his own imagination: and, therefore, we see by infinite examples, and none more memorable than that of Constantinus the last Emperor of the Greeks, and the citizens of Constantinople, that subjects do often choose rather to be frugal dispensers for their enemies, than liberal lenders to their prince. Again, wheresoever the wealth of the subject is engrossed into few hands, it is not possible it should be so respondent and yielding to payments and contributions for the public, both because the true estimation or assessment of great wealth is more obscure and uncertain; and, because the burden seemeth lighter when the charge lieth upon many hands; and, further, because the same greatness of wealth is for the most part not collected and obtained without sucking it from many, according to the received similitude of the spleen, which never swelleth but when the rest of the body pineth and abateth. And, lastly, it cannot be that any wealth should leave a second overplus for the public that doth not first leave an overplus to the private stock of him that gathers it; and, therefore, nothing is more certain, than that those states are least able to aid and defray great charge for wars, or other public disbursements, whose wealth resteth chiefly in the hands of the nobility and gentlemen. For what by reason of their magnificence and waste in expense, and what by reason of their desire to advance and make great their own families, and again upon the coincidence of the former reason, because they are always the fewest; small is the help, as to payments or charge, that can be levied or expected from them towards the occasions of a state. Contrary it is of such states whose wealth resteth in the hands of merchants, burghers, tradesmen, freeholders, farmers in the country, and the like, whereof we have a most evident and present example before our eyes, in our neighbours of the Low Countries, who could never have endured and continued so inestimable and insupportable charge, either by their natural frugality, or by

their mechanical industry, were it not also that there was a concurrence in them of this last reason, which is, that their wealth was dispersed in many hands, and not engrossed into few; and those hands were not much of the nobility, but most and generally of inferior conditions.

To make application of this part concerning treasure to your majesty's kingdoms:

First, I suppose I cannot err, that as to the endowment of your crown, there is not any crown of Europe, that hath so great a proportion of demesne and land revenue. Again, he that shall look into your prerogative shall find it to have as many streams to feed your treasury, as the prerogative of any of the said kings, and yet without oppression or taxing of your people. For they be things unknown in many other states, that all rich mines should be yours, though in the soil of your subjects; that all wardships should be yours, where a tenure in chief is, of lands held of your subjects; that all confiscations and escheats of treason should be yours, though the tenure be of the subject; that all actions popular, and the fines and casualties thereupon may be informed in your name, and should be due unto you, and a moiety at the least where the subject himself informs. And, further, he that shall look into your revenues at the ports of the sea, your revenues in courts of justice, and for the stirring of your seals, the revenues upon your clergy, and the rest, will conclude, that the law of England studied how to make a rich crown, and yet without levies upon your subject. For merchandising, it is true, it was ever by the kings of this realm despised, as a thing ignoble and indign for a king, though it is manifest, the situation and commodities of this island considered, it is infinite, what your majesty might raise, if you would do as a King of Portugal doth, or a Duke of Florence, in matter of merchandise. As for the wealth of the subject:*

To proceed to the articles affirmative, the first was.

That the true greatness of an estate consisteth in the natural and fit situation of the region or place.

Wherein I mean nothing superstitiously touching the fortunes or fatal destiny of any places, nor philosophically touching their configuration with the superior globe. But I understand proprieties and respects merely civil and according to the nature of human actions, and the true considerations of the estate. Out of which duly weighed, there doth arise a triple distribution of the fitness of a region for a great monarchy. First, that it be of hard access. Secondly, that it be seated in no extreme angle, but commodiously in the midst of many regions. And, thirdly, that it be maritime, or at the least upon great navigable rivers; and be not inland or mediterrane. And that these are not conceits, but notes of event, it appeareth manifestly, that all great monarchies and states have been seated in such manner, as if you would place them again, observing these three points which I have mentioned, you cannot place them better; which shows the pre-eminence of nature, unto which human industry or accident cannot be equal, especially in any continuance of time. Nay, if a man look into these things, more attentively, he shall see divers of these seats of monarchies, how fortune hath hovered still about the places, coming and going only in regard of the fixed reason of the conveniency of the place, which is immutable. And, therefore, first we see the excellent situation of Egypt; which seemeth to have been the most ancient monarchy, how conveniently it stands upon a neck of land, commanding both seas on either side, and embracing, as it were with two arms, Asia and Afric, besides the benefit of the famous river of Nilus. And, therefore, we see what hath been the fortune of that country, there having been two mighty returns of fortune, though at great distance of time; the one in the times of Sesostris, and the other in the empire of the Mamalukes, besides the middle greatness of the kingdom of the Ptolemys, and of the greatness of the caliphs and sultans in the latter times. And this region, we see likewise, is of strait and defensible access, being commonly called of the Romans, "Claustra Ægypti." Consider in like manner the situation of Babylon, being planted most strongly in regard of lakes and overflowing grounds between the two great navigable rivers of Euphrates and Tigris, and in the very heart of the world; having regard to the four "cardines" of east and west and northern and southern regions. And, therefore, we see, that although the sovereignty alter, yet the seat still of the monarchy remains in that place. For after the monarchies of the Kings of Assyria, which were natural kings of that place, yet when the foreign Kings of Persia came in, the seat remained. For, although the mansion of the persons of the Kings of Persia were sometimes at Susa, and sometimes at Ecbatana, which were termed their winter and their summer parlours, because of the mildness of the air in the one, and the freshness in the other; yet the city of estate continued to be Babylon. Therefore, we see, that Alexander the Great, according to the advice of Calanus the Indian, that showed him a bladder, which, if it were borne down at one end, would rise at the other, and therefore wished him to keep himself in the middle of his empire, chose accordingly Babylon for his seat, and died there. And, afterwards, likewise in the family of Seleucus and his decendants, kings of the east, although divers of them, for their own glory, were founders of cities of their own names, as Antiochia, Seleucia, and divers others, which they sought by all means to raise and adorn, yet the

* Memorandum, Here was a blank side left to continue the sense.

greatness still remained according unto nature with the ancient seat. Nay, further on, the same remained during the greatness of the Kings of Parthia, as appeareth by the verse of Lucan, who wrote in Nero's time.

"Cumque superba staret Babylon spoliandà trophaeis."

And after that, again it obtained the seat of the highest caliph or successors of Mahomet. And at this day, that which they call Bagdat, which joins to the ruin of the other, containeth one of the greatest satrapies of the Levant. So again Persia, being a country imbarred with mountains, open to the seas, and in the middle of the world, we see hath had three memorable revolutions of great monarchies. The first in the time of Cyrus; the second in the time of the new Artaxerxes, who raised himself in the reign of Alexander Severus, Emperor of Rome; and now of late memory, in Ismael the sophy, whose descendants continue in empire and competition with the Turks to this day.

So, again, Constantinople, being one of the most excellentest seats of the world, in the confines of Europe and Asia.

A PROPOSITION TO HIS MAJESTY,

BY SIR FRANCIS BACON, KNIGHT,

HIS MAJESTY'S ATTORNEY-GENERAL, AND ONE OF HIS PRIVY COUNCIL;

TOUCHING THE COMPILING AND AMENDMENT OF THE LAWS OF ENGLAND.

Your majesty, of your favour, having made me privy-counsellor, and continuing me in the place of your attorney-general, which is more than was these hundred years before, I do not understand it to be, that by putting off the dealing in causes between party and party, I should keep holyday the more; but that I should dedicate my time to your service with less distraction. Wherefore, in this plentiful accession of time, which I have now gained, I take it to be my duty, not only to speed your commandments and the business of my place, but to meditate and to excogitate of myself, wherein I may best, by my travels, derive your virtues to the good of your people, and return their thanks and increase of love to you again. And, after I had thought of many things, I could find, in my judgment, none more proper for your majesty as a master, nor for me as a workman, than the reducing and recompiling of the laws of England.

Your majesty is a king blessed with posterity; and these kings sort best with acts of perpetuity, when they do not leave them, instead of children; but transmit both line and merit to future generations. You are a great master in justice and judicature, and it were pity that the fruit of that virtue should die with you. Your majesty also reigneth in learned times: the more, in regard of your own perfections and patronage of learning; and it hath been the mishap of works of this nature, that the less learned time hath wrought upon the more learned, which now will not be so. As for myself, the law is my profession, to which I am a debtor. Some little helps I may have of other learning, which may give form to matter; and your majesty hath set me in an eminent place, whereby in a work, which must be the work of many, I may the better have coadjutors. Therefore, not to hold your majesty with any long preface, in that which I conceive to be nothing less than words, I will proceed to the matter: which matter itself, nevertheless, requireth somewhat briefly to be said, both of the dignity, and likewise of the safety, and convenience of this work: and then to go to the main: that is to say, to show how the work is to be done: which incidently also will best demonstrate, that it is no vast nor speculative thing, but real and feasible. Callisthenes, that followed Alexander's court, and was grown in some displeasure with him, because he could not well brook the Persian adoration; at a supper, which with the Grecians was ever a great part talk, was desired, because he was an eloquent man, to speak of some theme; which he did, and chose for his theme the praise of the Macedonian nation; which though it were but a filling thing to praise men to their faces, yet he did it with such advantage of truth, and avoidance of flattery, and with such life, as the hearers were so ravished with it that they plucked the roses off from their garlands, and threw them upon him; as the manner of applauses then was. Alexander was not pleased with it, and by way of discountenance said, It was easy to be a good orator in a pleasing theme: "But," saith he to Callisthenes, "turn your style, and tell us now of our faults, that we may have the profit, and not you only the praise;" which he presently did with such a force, and so

piquantly, that Alexander said, The goodness of his theme had made him eloquent before; but now it was the malice of his heart that had inspired him.

1. Sir, I shall not fall into either of those two extremes, concerning the laws of England; they commend themselves best to them that understand them; and your majesty's chief justice of your bench hath in his writings magnified them not without cause: certainly they are wise, they are just and moderate laws; they give to God, they give to Cæsar, they give to the subjects, that which appertaineth. It is true, they are as mixt as our language, compounded of British, Roman, Saxon, Danish, Norman customs. And, as our language is so much the richer, so the laws are the more complete: neither doth this attribute less to them, than those that would have them to have stood out the same in all mutations; for no tree is so good first set, as by transplanting.

2. As for the second extreme, I have nothing to do with it by way of taxing the laws. I speak only by way of perfecting them, which is easiest in the best things: for that which is far amiss hardly receiveth amendment; but that which hath already, to that more may be given. Besides, what I shall propound is not to the matter of the laws, but to the manner of their registry, expression, and tradition: so that it giveth them rather light than any new nature. This being so, for the dignity of the work I know scarcely where to find the like: for, surely, that scale, and those degrees of sovereign honour, are true and rightly marshalled; first, the founders of states; then the lawgivers; then the deliverers and saviours after long calamities; then the fathers of their countries, which are just and prudent princes; and, lastly, conquerors, which honour is not to be received amongst the rest, except it be where there is an addition of more country and territory to a better government, than that was of the conquered. Of these, in my judgment, your majesty may with more truth and flattery, be entitled to the first, because of your uniting of Britain and planting Ireland; both which savour of the founder. That which I now propound to you, may adopt you also into the second: lawgivers have been called "principes perpetui;" because, as Bishop Gardiner said in a bad sense, that he would be bishop a hundred years after his death, in respect of the long leases he made: so lawgivers are still kings and rulers after their decease, in their laws. But this work, shining so in itself, needs no taper. For the safety and convenience thereof, it is good to consider, and to answer those objections, or scruples, which may arise, or be made against this work.

Obj. I. That it is a thing needless; and that the law, as it now is, is in good estate comparable to any foreign law; and, that it is not possible for the wit of man, in respect of the frailty thereof, to provide against the uncertainties and evasions, or omissions of law.

Resp. For the comparison with foreign laws, it is in vain to speak of it; for men will never agree about it. Our lawyers will maintain for our municipal laws; civilians, scholars, travellers, will be of the other opinion.

But, certain it is, that our laws, as they now stand, are subject to great uncertainties, and variety of opinion, delays, and evasions: whereof ensueth,

1. That the multiplicity and length of suits is great.

2. That the contentious person is armed, and the honest subject wearied and oppressed.

3. That the judge is more absolute; who, in doubtful cases, hath a greater stroke and liberty.

4. That the Chancery Courts are more filled, the remedy of law being often obscure and doubtful.

5. That the ignorant lawyer shroudeth his ignorance of law, in that doubts are so frequent and many.

6. That men's assurances of their lands and estates by patents, deeds, wills, are often subject to question, and hollow; and many the like inconveniences.

It is a good rule and direction, for that all laws, "secundum majus et minus," do participate of uncertainties, that followeth: Mark, whether the doubts that arise, are only in cases not of ordinary experience; or which happen every day. If in the first only, impute it to the frailty of man's foresight, that cannot reach by law to all cases; but, if in the latter, be assured there is a fault in the law. Of this I say no more, but that, to give every man his due, had it not been for Sir Edward Coke's Reports, (which, though they may have errors, and some peremptory and extra-judicial resolutions more than are warranted; yet, they contain infinite good decisions, and rulings over of cases,) the law, by this time, had been almost like a ship without ballast; for that the cases of modern experience are fled from those that are adjudged and ruled in former time.

But the necessity of this work is yet greater in the statute law. For, first, there are a number of ensnaring penal laws, which lie upon the subject; and if, in bad times, they should be awaked, and put in execution, would grind them to powder.

There is a learned civilian that expoundeth the curse of the prophet, "Pluet super eos laqueos," of a multitude of penal laws, which are worse than showers of hail, or tempest upon cattle, for they fall upon men.

There are some penal laws fit to be retained, but their penalty too great; and, it is ever a rule, That any overgreat penalty, besides the acerbity of it, deadens the execution of the law.

There is a further inconvenience of penal laws, obsolete, and out of use; for that it brings a gan-

grene, neglect, and habit of disobedience upon other wholesome laws, that are fit to be continued in practice and execution; so that our laws endure the torment of Mezentius:

"The living die in the arms of the dead."

Lastly, There is such an accumulation of statutes concerning one matter, and they so cross and intricate, as the certainty of law is lost in the heap; as your majesty had experience last day upon the point, Whether the incendiary of Newmarket should have the benefit of his clergy.

Obj. II. That it is a great innovation; and, innovations are dangerous beyond foresight.

Resp. All purgings and medicines, either in the civil or natural body, are innovations: so as that argument is a common place against all noble reformations. But the truth is, that this work ought not to be termed or held for any innovation in the suspected sense. For those are the innovations which are quarrelled and spoken against, that concern the consciences, estates, and fortunes of particular persons: but this of general ordinance pricketh not particulars, but passeth "sine strepitu." Besides, it is on the favourable part; for it easeth, it presseth not: and, lastly, it is rather matter of order and explanation than of alteration. Neither is this without precedent in former governments.

The Romans, by their decemvirs, did make their twelve tables; but that was indeed a new enacting or constituting of laws, not a registering or recompiling; and they were made out of the laws of the Grecians, not out of their own customs.

In Athens they had sexviri, which were standing commissioners to watch and to discern what laws waxed improper for the time; and what new law did, in any branch, cross a former law, and so, "ex officio," propounded their repeals.

King Lewis XI. of France, had it in his intention to have made one perfect and uniform law, out of the civil law, Roman, and the provisional customs of France.

Justinian the emperor, by commission directed to divers persons learned in the laws, reduced the Roman laws from vastness of volume, and a labyrinth of uncertainties, unto that course of the civil law which is now in use. I find here at home of late years, that King Henry VIII., in the twenty-seventh of his reign, was authorized by parliament to nominate thirty-two commissioners, part ecclesiastical, part temporal, to purge the canon law, and to make it agreeable to the law of God, and the law of the realm; and the same was revived in the fourth year of Edward VI., though neither took effect.

For the laws of Lycurgus, Solon, Minos, and others of ancient time, they are not the worse, because grammar scholars speak of them: but things too ancient wax children with us again.

Edgar, the Saxon king, collected the laws of this kingdom, and gave them the strength of a fagot bound, which formerly were dispersed.

The statutes of King Edward the First were fundamental. But, I doubt, I err in producing so many examples: for, as Cicero saith to Cæsar, so may I say to your majesty; "Nil vulgare te dignum videri possit."

Obj. III. In this purging of the course of the common laws and statutes, much good may be taken away.

Resp. In all purging, some good humours may pass away; but that is largely recompensed by lightening the body of much bad.

Obj. IV. Labour were better bestowed, in bringing the common laws of England to a text law, as the statutes are, and setting both of them down in method and by titles.

Resp. It is too long a business to debate, whether "lex scripta, aut non scripta," a text law, or customs well registered, with received and approved grounds and maxims, and acts and resolutions judicial, from time to time duly entered and reported, be the better form of declaring and authorizing laws. It was the principal reason or oracle of Lycurgus, that none of his laws should be written. Customs are laws written in living tables, and some traditions the church doth not disauthorize. In all sciences they are the soundest, that keep close to particulars; and, sure I am, there are more doubts that rise upon our statutes, which are a text law, than upon the common law, which is no text law. But, howsoever that question be determined, I dare not advise to cast the law into a new mould. The work, which I propound, tendeth to pruning and grafting the law, and not to ploughing up and planting it again; for such a remove I should hold indeed for a perilous innovation.

Obj. V. It will turn the judges, counsellors of law, and students of law to school again, and make them to seek what they shall hold and advise for law; and it will impose a new charge upon all lawyers to furnish themselves with new books of law.

Resp. For the former of these, touching the new labour, it is true it would follow, if the law were new moulded into a text law; then men must be new to begin, and that is one of the reasons for which I disallow that course.

But in the way that I shall now propound, the entire body and substance of law shall remain, only discharged of idle and unprofitable or hurtful matter; and illustrated by order and other helps, towards the better understanding of it, and judgment thereupon.

For the latter, touching the new charge, it is not worthy the speaking of in matter of so high importance; it might have been used of the new translation of the Bible, and such like works. Books must follow sciences, and not sciences books.

This work is to be done, to use some few words, which is the language of action and effect, in this manner.

It consisteth of two parts; the digest or recompiling of the common laws, and that of the statutes.

In the first of these, three things are to be done:

1. The compiling of a book "De antiquitatibus juris."

2. The reducing or perfecting of the course or corps of the common laws.

3. The composing of certain introductive and auxiliary books touching the study of the laws.

For the first of these, all ancient records in your Tower, or elsewhere, containing acts of parliament, letters patents, commissions, and judgments, and the like, are to be searched, perused, and weighed: and out of these are to be selected those that are of most worth and weight, and in order of time, not of titles, for the more conformity with the year-books, to be set down and registered, rarely in "hæc verba;" but summed with judgment, not omitting any material part; these are to be used for reverend precedents, but not for binding authorities.

For the second, which is the main, there is to be made a perfect course of the law "in serie temporis," or year-books, as we call them, from Edward the First to this day: in the compiling of this course of law, or year-books, the points following are to be observed.

First, All cases which are at this day clearly no law, but constantly ruled to the contrary, are to be left out; they do but fill the volumes, and season the wits of students in a contrary sense of law. And so, likewise, all cases, wherein that is solemnly and long debated, whereof there is now no question at all, are to be entered as judgments only, and resolutions, but without the arguments, which are now become but frivolous: yet, for the observation of the deeper sort of lawyers, that they may see how the law hath altered, out of which they may pick sometimes good use, I do advise, that upon the first in time of those obsolete cases there was a memorandum set, that at that time the law was thus taken, until such a time, &c.

Secondly, Homonymiæ, as Justinian calleth them, that is, cases merely of iteration and repetition, are to be purged away: and the cases of identity, which are best reported and argued, to be retained instead of the rest; the judgments, nevertheless, to be set down, every one in time as they are, but with a quotation or reference to the case where the point is argued at large: but if the case consist, part of repetition, part of new matter, the repetition is only to be omitted.

Thirdly, As to the Antinomiæ, cases judged to the contrary, it were too great a trust to refer to the judgment of the composers of this work, to decide the law either way, except there be a current stream of judgments of later times; and then I reckon the contrary cases amongst cases obsolete, of which I have spoken before: nevertheless, this diligence would be used, that such cases of contradiction be specially noted and collected, to the end those doubts, that have been so long militant, may either, by assembling all the judges in the exchequer chamber, or by parliament, be put into certainty. For to do it, by bringing them in question under feigned parties, is to be disliked. "Nihil habeat forum ex scena."

Fourthly, All idle queries, which are but seminaries of doubts, and uncertainties, are to be left out and omitted, and no queries set down, but of great doubts well debated, and left undecided for difficulty; but no doubting or upstarting queries, which, though they be touched in argument for explanation, yet were better to die than to be put into the books.

Lastly, Cases reported with too great prolixity would be drawn into a more compendious report; not in the nature of an abridgment, but tautologies and impertinences to be cut off: as for misprinting, and insensible reporting, which many times confound the students, that will be "obiter" amended; but more principally, if there be any thing in the report which is not well warranted by the record, that is also to be rectified: the course being thus compiled, then it resteth but for your majesty to appoint some grave and sound lawyers, with some honourable stipend, to be reporters* for the time to come, and then this is settled for all times.

For the auxiliary books that conduce to the study and science of the law, they are three: Institutions; a treatise "De regulis juris;" and a better book "De verborum significationibus," or terms of the law. For the Institutions, I know well there be books of introductions, wherewith students begin, of good worth, especially Littleton and Fitzherbert's "Natura brevium;" but they are noways of the nature of an institution; the office whereof is to be a key and general preparation to the reading of the course. And principally it ought to have two properties; the one a perspicuous and clear order or method; and the other, a universal latitude or comprehension, that the students may have a little prenotion of every thing, like a model towards a great building. For the treatise "De regulis juris," I hold it, of all other things, the most important to the health, as I may term it, and good institutions of any laws: it is indeed like the ballast of a ship,

* This constitution of reporters I obtained of the king, after I was chancellor; and there are two appointed with 100l. a year apiece stipend.

to keep all upright and stable; but I have seen little in this kind, either in our law or other laws, that satisfieth me. The naked rule or maxim doth not the effect: It must be made useful by good differences, ampliations, and limitations, warranted by good authorities; and this not by raising up of quotations and references, but by discourse and deducement in a just tractate. In this I have travelled myself, at the first more cursorily, since with more diligence, and will go on with it, if God and your majesty will give me leave. And I do assure your majesty, I am in good hope, that when Sir Edward Coke's Reports, and my rules and decisions shall come to posterity, there will be, whatsoever is now thought, question, who was the greater lawyer? For the books of the terms of the law, there is a poor one, but I wish a diligent one, wherein should be comprised not only the exposition of the terms of law, but of the words of all ancient records and precedents.

For the abridgments, I could wish, if it were possible, that none might use them, but such as had read the course first, that they might serve for repertories to learned lawyers, and not to make a lawyer in haste: but since that cannot be, I wish there were a good abridgment composed of the two that are extant, and in better order. So much for the common law.

For the reforming and recompiling of the statute law, it consisteth of four parts.

1. The first, to discharge the books of those statutes, where the case, by alteration of time, is vanished; as Lombards Jews, Gauls half-pence, &c. Those may nevertheless remain in the libraries for antiquities, but no reprinting of them. The like of statutes long since expired and clearly repealed; for if the repeal be doubtful, it must be so propounded to the parliament.

2. The next is, to repeal all statutes which are sleeping and not of use, but yet snaring and in force: in some of those it will perhaps be requisite to substitute some more reasonable law, instead of them, agreeable to the time; in others a simple repeal may suffice.

3. The third, that the grievousness of the penalty in many statutes be mitigated, though the ordinance stand.

4. The last is, the reducing of concurrent statutes, heaped one upon another, to one clear and uniform law. Towards this there hath been already, upon my motion, and your majesty's direction, a great deal of good pains taken; my Lord Hobart, myself, Serjeant Finch, Mr. Heneage Finch, Mr. Noye, Mr. Hackwell, and others, whose labours being of a great bulk, it is not fit now to trouble your majesty with any further particularity therein; only by this you may perceive the work is already advanced: but because this part of the work, which concerneth the statute laws, must of necessity come to parliament, and the Houses will best like that which themselves guide, and the persons that themselves employ, the way were to imitate the precedent of the commissioners for the canon laws in 27 Hen. VIII., and 4 Edw. VI., and the commissioners for the union of the two realms, "primo" of your majesty, and so to have the commissioners named by both Houses; but not with a precedent power to conclude, but only to prepare and propound to parliament.

This is the best way, I conceive, to accomplish this excellent work, of honour to your majesty's times, and of good to all times; which I submit to your majesty's better judgment.

AN OFFER TO KING JAMES

OF A DIGEST TO BE MADE

OF THE LAWS OF ENGLAND.

Most Excellent Sovereign:

Amongst the degrees and acts of sovereign, or rather heroical honour, the first or second, is the person and merit of a lawgiver. Princes that govern well, are fathers of the people; but, if a father breed his son well, or allow him well while he liveth, but leave him nothing at his death, whereby both he and his children, and his children's children, may be the better, surely the care and piety of a father is not in him complete. So, kings, if they make a portion of an age happy by their good government, yet, if they do not make testaments, as God Almighty doth, whereby a perpetuity of good may descend to their country, they are but mortal and transitory benefactors. Domitian, a few days before he died, dreamed that a golden head did rise upon the nape of his neck: which was truly performed in the golden

age that followed his times for five successions. But, kings, by giving their subjects good laws, may, if they will, in their own time, join and graft this golden head upon their own necks after their death. Nay, they may make Nabuchodonozor's image of monarchy golden from head to foot. And, if any of the meaner sort of politics, that are sighted only to see the worst of things, think, that laws are but cobwebs, and that good princes will do well without them, and bad will not stand much upon them; the discourse is neither good nor wise. For certain it is, that good laws are some bridle to bad princes, and as a very wall about government. And, if tyrants sometimes make a breach into them, yet they mollify even tyranny itself, as Solon's laws did the tyranny of Pisistratus: and then commonly they get up again, upon the first advantage of better times. Other means to perpetuate the memory and merits of sovereign princes are inferior to this. Buildings of temples, tombs, palaces, theatres, and the like, are honourable things, and look big upon posterity: but Constantine the Great gave the name well to those works, when he used to call Trajan, that was a great builder, Parietaria, wall-flower, because his name was upon so many walls: so, if that be the matter, that a king would turn wall-flower, or pellitory of the wall, with cost he may. Adrian's vein was better, for his mind was to wrestle a fall with time; and being a great progressor through all the Roman empire, whenever he found any decays of bridges, or highways, or cuts of rivers and sewers, or walls, or banks, or the like, he gave substantial order for their repair with the better. He gave, also, multitudes of charters, and liberties for the comfort of corporations and companies in decay: so that his bounty did strive with the ruins of time. But yet this, though it were an excellent disposition, went but in effect to the cases and shells of a commonwealth. It was nothing to virtue or vice. A bad man might indifferently take the benefit and ease of his ways and bridges, as well as a good; and bad people might purchase good charters. Surely the better works of perpetuity in princes are those that wash the inside of the cup; such as are foundations of colleges, and lectures for learning and education of youth; likewise foundations and institutions of orders and fraternities, for nobleness, enterprise, and obedience, and the like. But yet these also are but like plantations of orchards and gardens, in plots and spots of ground here and there; they do not till over the whole kingdom, and make it fruitful, as doth the establishing of good laws and ordinances; which makes a whole nation to be as a well-ordered college or foundation.

This kind of work, in the memory of times, is rare enough to show it excellent: and yet, not so rare, as to make it suspected for impossible, inconvenient, or unsafe. Moses, that gave laws to the Hebrews, because he was the scribe of God himself, is fitter to be named for honour's sake to other lawgivers, than to be numbered or ranked amongst them. Minos, Lycurgus, and Solon, are examples for themes of grammar scholars. For ancient personages and characters, now-a-days, use to wax children again; though that parable of Pindarus be true, the best thing is water: for common and trivial things are many times the best, and rather despised upon pride, because they are vulgar, than upon cause or use. Certain it is, that the laws of those three lawgivers had great prerogatives. The first, of fame, because they were the pattern amongst the Grecians: the second of lasting, for they continued longest without alteration: the third, of a spirit of reviver, to be often oppressed, and often restored.

Amongst the seven kings of Rome four were lawgivers: for it is most true, that a discourser of Italy saith; "there was never state so well swaddled in the infancy, as the Roman was by the virtue of their first kings; which was a principal cause of the wonderful growth of that state in after-times."

The decemvirs' laws were laws upon laws, not the original; for they grafted laws of Græcia upon the Roman stock of laws and customs: but such was their success, as the twelve tables which they compiled were the main body of the laws which framed and wielded the great body of that estate. These lasted a long time, with some supplementals and the Pretorian edicts "in albo;" which were, in respect of laws, as writing tables in respect of brass; the one to be put in and out, as the other is permanent. Lucius Cornelius Sylla reformed the laws of Rome: for that man had three singularities, which never tyrant had but he; that he was a lawgiver, that he took part with the nobility, and that he turned private man, not upon fear, but upon confidence.

Cæsar long after desired to imitate him only in the first, for otherwise he relied upon new men; and for resigning his power Seneca describeth him right; "Cæsar gladium cito condidit, nunquam posuit," "Cæsar soon sheathed his sword, but never put it off." And himself took it upon him, saying in scorn of Sylla's resignation; "Sylla nescivit literas, dictare non potuit," "Sylla knew no letters, he could not dictate." But for the part of a lawgiver, Cicero giveth him the attribute; "Cæsar, si ab eo quæreretur, quid egisset in toga: leges se respondisset multas et præclaras tulisse;" "If you had asked Cæsar what he did in the gown, he would have answered, that he made many excellent laws." His nephew Augustus did tread the same steps, but with deeper print, because of his long reign in peace; whereof one of the poets of his time saith,

"Pace data terris, animum ad civilia vertit
Jura suum; legesque tulit justissimus auctor."

From that time there was such a race of wit and

authority, between the commentaries and decisions of the lawyers, and the edicts of the emperors, as both law and lawyers, were out of breath. Whereupon, Justinian in the end recompiled both, and made a body of laws such as might be wielded, which himself calleth gloriously, and yet not above truth, the edifice or structure of a sacred temple of justice, built indeed out of the former ruins of books, as materials, and some novel constitutions of his own.

In Athens, they had sexviri, as Æschines observeth, which were standing commissioners, who did watch to discern what laws waxed improper for the times, and what new law did in any branch cross a former law, and so "ex officio" propounded their repeal.

King Edgar collected the laws of this kingdom, and gave them the strength of a fagot bound, which formerly were dispersed; which was more glory to him, than his sailing about this island with a potent fleet: for that was, as the Scripture saith, "via navis in mari," "the way of a ship in the sea;" it vanished, but this lasteth. Alphonso the Wise, the ninth of that name, King of Castile, compiled the digest of the laws of Spain, entitled the "Siete Partidas;" an excellent work, which he finished in seven years. And as Tacitus noteth well, that the Capitol, though built in the beginnings of Rome; yet was fit for the great monarchy that came after; so that building of laws sufficeth the greatness of the empire of Spain, which since hath ensued.

Lewis XI. had it in his mind, though he performed it not, to have made one constant law of France, extracted out of the civil Roman law, and the customs of provinces, which are various, and the king's edicts, which with the French are statutes. Surely he might have done well, if, like as he brought the crown, as he said himself, from Page, so he had brought his people from Lackey; not to run up and down for their laws to the civil law, and the ordinances, and the customs, and the discretions of courts, and discourses of philosophers, as they use to do.

King Henry VIII., in the twenty-seventh year of his reign, was authorized by parliament to nominate thirty-two commissioners, part ecclesiastical, and part temporal, to purge the canon law, and to make it agreeable to the law of God, and the law of the land; but it took not effect: for the sets of that king were commonly rather proffers and fames, than either well grounded, or well pursued: but, I doubt, I err in producing so many examples. For, as Cicero said to Cæsar, so I may say to your majesty, "Nil vulgare te dignum videri possit. Though, indeed, this, well understood, is far from vulgar: for that the laws of the most kingdoms and states have been like buildings of many pieces, and patched up from time to time according to occasions, without frame or model.

Now for the laws of England, if I shall speak my opinion of them without partiality either to my profession or country, for the matter and nature of them, I hold them wise, just, and moderate laws: they give to God, they give to Cæsar, they give to the subject, what appertaineth. It is true they are as mixed as our language; compounded of British, Roman, Saxon, Danish, Norman customs: and, surely, as our language is thereby so much the richer, so our laws are likewise by that mixture the more complete.

Neither doth this attribute less to them, than those that would have them to have stood out the same in all mutations. For no tree is so good first set, as by transplanting and grafting. I remember what happened to Callisthenes, that followed Alexander's court, and was grown into some displeasure with him, because he could not well brook the Persian adoration. At a supper, which with the Grecians was a great part talk, he was desired, the king being present, because he was an eloquent man, to speak of some theme, which he did; and chose for his theme, the praise of the Macedonian nation, which though it were but a filling thing to praise men to their faces, yet he performed it with such advantage of truth, and avoidance of flattery, and with such life, as was much applauded by the hearers. The king was the less pleased with it, not loving the man, and by way of discountenance said: It was easy to be a good orator in a pleasing theme. "But," saith he to him, "turn your style, and tell us now of our faults, that we may have the profit, and not you the praise only;" which he presently did with such quickness, that Alexander said, That malice made him eloquent then, as the theme had done before. I shall not fall into either of these extremes, in this subject of the laws of England; I have commended them before for the matter, but surely they ask much amendment for the form; which to reduce and perfect, I hold to be one of the greatest dowries that can be conferred upon this kingdom: which work, for the excellency, as it is worthy your majesty's act and times, so it hath some circumstance of propriety agreeable to your person. God hath blessed your majesty with posterity, and I am not of opinion that kings that are barren are fittest to supply perpetuity of generations by perpetuity of noble acts; but, contrariwise, that they that leave posterity are the more interested in the care of future times; that as well their progeny, as their people, may participate of their merit.

Your majesty is a great master in justice and judicature, and it were pity the fruit of that your virtue should not be transmitted to the ages to come. Your majesty also reigneth in learned times, the more, no doubt, in regard of your own perfection in learning, and your patronage thereof. And it hath been the mishap of works of this nature, that the less learned time hath, sometimes, wrought upon the more learned, which now will not be so. As for myself, the law was my profession to

which I am a debtor: some little helps, I have of other arts, which may give form to matter: and I have now, by God's merciful chastisement, and by his special providence, time and leisure to put my talent, or half talent, or what it is, to such exchanges as may perhaps exceed the interest of an active life. Therefore, as in the beginning of my troubles I made offer to your majesty to take pains in the story of England, and in compiling a method and digest of your laws, so have I performed the first, which resteth but upon myself, in some part: and I do in all humbleness renew the offer of this latter, which will require help and assistance, to your majesty, if it shall stand with your good pleasure to employ my service therein.

A

CERTIFICATE TO HIS MAJESTY,

TOUCHING THE PROJECTS OF

SIR STEPHEN PROCTOR RELATING TO THE PENAL LAWS.

IT MAY PLEASE YOUR SACRED MAJESTY,

WITH the first free time from your majesty's service of more present dispatch, I have perused the projects of Sir Stephen Proctor, and do find it a collection of extreme diligence and inquisition, and more than I thought could have met in one man's knowledge. For, though it be an easy matter to run over many offices and professions, and to note in them general abuses or deceits; yet, nevertheless, to point at and trace out the particular and covert practices, shifts, devices, tricks, and, as it were, stratagems in the meaner sort of the ministers of justice or public service, and to do it truly and understandingly, is a discovery whereof great good use may be made for your majesty's service and good of your people. But because this work, I doubt not, hath been to the gentleman the work of years, whereas my certificate must be the work but of hours or days, and that it is commonly and truly said, that he that embraceth much, straineth and holdeth the less, and that propositions have wings, but operation and execution have leaden feet: I most humbly desire pardon of your majesty, if I do for the present only select some one or two principal points, and certify my opinion thereof; reserving the rest as a sheaf by me to draw out, at further time, further matter for your majesty's information for so much as I shall conceive to be fit or worthy the consideration.

For that part, therefore, of these projects which concerneth penal laws, I do find the purpose and scope to be, not to press a greater rigour or severity in the execution of penal laws; but to repress the abuses in common informers, and some clerks and under-ministers, that for common gain partake with them: for if it had tended to the other point, I for my part should be very far from advising your majesty to give ear unto it. For, as it is said in the psalm, "If thou, Lord, should be extreme to mark what is done amiss, who may abide it?" So it is most certain, that your people is so ensnared in a multitude of penal laws, that the execution of them cannot be borne. And, as it followeth; "But with thee is mercy, that thou mayest be feared:" so it is an intermixture of mercy and justice that will bring you fear and obedience: for too much rigour makes people desperate. And, therefore, to leave this, which was the only blemish of King Henry VII.'s reign, and the unfortunate service of Empson and Dudley, whom the people's curses, rather than any law, brought to overthrow; the other work is a work not only of profit to your majesty, but of piety towards your people. For, if it be true in any proportion, that within these five years of your majesty's happy reign, there hath not five hundred pounds benefit come to your majesty by penal laws, the fines of the Star Chamber, which are of a higher kind, only excepted, and yet, nevertheless, there hath been a charge of at least fifty thousand pounds, which hath been laid upon your people, it were more than time it received a remedy.

This remedy hath been sought by divers statutes, as principally by a statute in 18, and another of 31, of the late queen of happy memory. But I am of opinion, that the appointing of an officer proper for that purpose, will do more good than twenty statutes, and will do that good effectually, which these statutes aim at intentionally.

And this I do allow of the better, because it is none of those new superintendencies, which I see many times offered upon pretence of reformation,

as if judges did not their duty, or ancient and sworn officers did not their duty, and the like: but it is only to set a custos or watchman, neither over judges nor clerks, but only over a kind of people that cannot be sufficiently watched or overlooked, and that is, the common promoters or informers: the very awe and noise whereof will do much good, and the practice much more.

I will, therefore, set down first, what is the abuse or inconvenience, and then what is the remedy which may be expected from the industry of this officer. And, I will divide it into two parts, the one, for that, that may concern the ease of your people, for with that will I crave leave to begin, as knowing it to be principal in your majesty's intention, and the other for that that may concern your majesty's benefit.

Concerning the ease of his majesty's subjects, polled and vexed by common informers.

The abuses or inconveniences.

1. An informer exhibits an information, and in that one information he will put a hundred several subjects of this information. Every one shall take out copies, and every one shall put in his several answer. This will cost perhaps a hundred marks: that done, no further proceeding. But the clerks have their fees, and the informer hath his dividend for bringing the water to the mill.

It is to be noted, that this vexation is not met with by any statute. For it is no composition, but a discontinuance; and in that case there is no penalty, but costs: and the poor subject will never sue for his costs, lest it awake the informer to revive his information, and so it escapeth clearly.

2. Informers receive pensions of divers persons to forbear them. And this is commonly of principal offenders, and of the wealthiest sort of tradesmen. For if one tradesman may presume to break the law, and another not, he will be soon richer than his fellows. As, for example, if one draper may use tenters, because he is in fee with an informer, and others not, he will soon outstrip the good tradesman that keeps the law.

And, if it be thought strange that any man should seek his peace by one informer, when he lieth open to all, the experience is otherwise: for one informer will bear with the friend of another, looking for the like measures.

And, besides, they have devices to get priority of information, and to put in an information "de bene esse," to prevent others, and to protect their pensioners.

And if it be said this is a pillory matter to the informer, and therefore he will not attempt it; although therein the statute is a little doubtful: yet if hanging will not keep thieves from stealing, it is not pillory will keep informers from polling.

And, herein, Sir Stephen addeth a notable circumstance: that they will peruse a trade, as of brewers or victuallers, and if any stand out, and will not be in fee, they will find means to have a dozen informations come upon him at once.

3. The subject is often for the same offence vexed by several informations: sometimes the one informer not knowing of the other; and often by confederacy, to weary the party with charge: upon every of which goeth process, and of

The remedies by the industry of the officer.

1. The officer by his diligence finding this case, is to inform the court thereof, who thereupon may grant good costs against the informer, to every of the subjects vexed: and withal not suffer the same informer to revive his information against any of them; and, lastly, fine him, as for a misdemeanor and abuse of justice: and by that time a few of such examples be made, they will be soon weary of that practice.

2. This is an abuse that appeareth not by any proceeding in court, because it is before suit commenced, and therefore requireth a particular inquiry.

But when it shall be the care and cogitation of one man to overlook informers, these things are easily discovered: for let him but look who they be that the informer calls in question, and hearken who are of the same trade in the same place and are spared, and it will be easy to trace a bargain.

In this case, having discovered the abuse, he ought to inform the barons of the exchequer, and the king's learned counsel, that by the Star Chamber, or otherwise, such taxers of the king's subjects may be punished.

3. The officer keeping a book of all the informations put in, with a brief note of the matter, may be made acquainted with all informations to come in: and if he find a precedent for the same cause, he may inform some of

every of them he must take copies, and make answers, and so relieve himself by motion of the court if he can; all which multiplieth charge and trouble.

the barons, that by their order the receiving of the latter may be stayed without any charge to the party at all; so as it appear by the due prosecution of the former, that it is not a suit by collusion to protect the party.

Concerning the king's benefit, which may grow by a moderate prosecution of some penal laws.

The abuses are inconveniences.

1. After an information is exhibited and answered, for so the statute requires, the informer for the most part groweth to composition with the defendant; which he cannot do without peril of the statute, except he have license from the court, which license he ought to return by order and course of the court, together with a declaration upon his oath of the true sum that he takes for the composition. Upon which license so returned, the court is to tax a fine for the king.

This ought to be, but as it is now used, the license is seldom returned. And although it contain a clause that the license shall be void, if it be not duly returned; yet the manner is to suggest that they are still in terms of composition, and so to obtain new days, and to linger it on till a Parliament and a pardon come.

Also, when the license is returned, and thereupon the judge or baron to sesse a fine; there is none for the king to inform them of the nature of the offence; of the value to grow to the king if the suit prevail; of the ability of the person, and the like. By reason whereof, the fine that is set is but a trifle, as 20, 30, or 40*s*., and it runs in a form likewise, which I do not well like: for it is "ut parcatur misis," which purporteth, as if the party did not any way submit himself, and take the composition as of grace of the court, but as if he did justify himself, and were content to give a trifle to avoid charge.

Which point of form hath a shrewd consequence: for it is some ground that the fine is set too weak.

And as for the informer's oath touching his composition, which is commonly a trifle, and is the other ground of the smallness of the fine, it is, no doubt, taken with an equivocation: as taking such a sum in name of a composition, and some greater matter by some indirect or collateral mean.

Also, these fines, light as they be, are seldom answered and put in process.

2. An information goeth on to trial, and passeth for the king. In this case of recovery, the informer will be satisfied, and will take his whole moiety, for that he accounts to be no composition: that done, none will be at charge to return the "postea," and to procure judgment and execution for the king. For the informer hath that he sought for, the clerks will do nothing without fees paid, which,

duly put in process, and answered.

2. The officer is to follow for the king, that the "posteas" be returned.

The remedies.

1. The officer in this point is to perform his greatest service to the king, in soliciting for the king in such sort as licenses be duly returned, the deceits of these fraudulent compositions discovered, and fines may be set for the king in some good proportion, having respect to the values both of the matter and the person: for the king's fines are not to be delivered, as moneys given by the party, "ad redimendam vexationem," but as moneys given "ad redimendam culpam et pœnam legis;" and ought to be in such quantity, as may not make the laws altogether trampled down and contemned. Therefore the officer ought first to be made acquainted with every license, that he may have an eye to the sequel of it: then ought he to be the person that ought to prefer unto the judges or barons, as well the bills for the taxations of the fines, as the orders for giving further days, to the end that the court may be duly informed both of the weight of causes, and the delays therein used; and, lastly, he is to see that the fines sessed, be

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3. The officer in such case, is to inform the king's learned counsel, that they may prosecute if they think fit.

4. The officer is to take knowledge of such seizures, and to give information to the court concerning them.

This is of more difficulty, because seizures are matter in fact, whereas suits are matter of record: and it may require more persons to be employed, as at the ports, where is much abuse.

therefore some entry ought to be made of them.

There be other points wherein the officer may be of good use, which may be comprehended in his grant or instructions, wherewith I will not now trouble your majesty, for I hold these to be the principal.

Thus have I, according to your majesty's reference, certified my opinion of that part of Sir Stephen Proctor's projects, which concerneth penal laws: which I do wholly and most humbly submit to your majesty's high wisdom and judgment, wishing withal that some conference may be had by Mr. Chancellor and the barons, and the rest of the learned counsel, to draw the service to a better perfection. And most specially that the travels therein taken may be considered and discerned of by the lord treasurer, whose care and capacity is such, as he doth always either find or choose that which is best for your majesty's service.

The recompense unto the gentleman, it is not my part to presume to touch, otherwise than to put your majesty in remembrance of that proportion, which your majesty is pleased to give to others out of the profits they bring in, and perhaps with a great deal less labour and charge.

ADVICE TO THE KING,

TOUCHING

MR. SUTTON'S ESTATE.

IT PLEASE YOUR MAJESTY,

ND it a positive precept of the old law, here should be no sacrifice without salt: oral whereof, besides the ceremony, may at God is not pleased with the body of a intention, except it be seasoned with that al wisdom and judgment, as it be not subject to be corrupted and perverted: lt, in the Scripture, is a figure both of m and lasting. This cometh into my upon this act of Mr. Sutton, which th to me as a sacrifice without salt; having aterials of a good intention, but not pow- with any such ordinances and institutions y preserve the same from turning corrupt, east from becoming unsavoury, and of little For though the choice of the feoffees be e best, yet neither can they always live; and the very nature of the work itself, in the vast and unfit proportions thereof, being apt to provoke a misemployment: it is no diligence of theirs, except there be a digression from that model, that can excuse it from running the same way that gifts of like condition have heretofore done. For to design the Charterhouse, a building fit for a prince's habitation, for an hospital, is all one as if one should give in alms a rich embroidered cloak to a beggar. And certainly a man may see "tanquam quæ oculis cernuntur," that if such an edifice, with six thousand pounds revenue, be erected into one hospital, it will in small time degenerate to be made a preferment of some great person to be master, and he to take all the sweet, and the poor to be stinted, and take but the crumbs; as it comes to pass in divers hospitals of this realm, which have but the names of hospitals, and are only wealthy benefices in

respect of the mastership; but the poor, which is the "propter quid," little relieved. And the like hath been the fortune of much of the alms of the Roman religion in their great foundations, which being begun in vainglory and ostentation, have had their judgment upon them, to end in corruption and abuse. This meditation hath made me presume to write these few lines to your majesty; being no better than good wishes, which your majesty's great wisdom may make something or nothing of.

Wherein I desire to be thus understood, that if this foundation, such as it is, be perfect and good in law, then I am too well acquainted with your majesty's disposition, to advise any course of power or profit that is not grounded upon a right: nay, farther, if the defects be such as a court of equity may remedy and cure, then I wish that, as St. Peter's shadow did cure diseases, so the very shadow of a good intention may cure defects of that nature. But if there be a right, and birthright planted in the heir, and not remediable by courts of equity, and that right be submitted to your majesty, whereby it is both in your power and grace what to do: then I do wish that this rude mass and chaos of a good deed were directed rather to a solid merit, and durable charity, than to a blaze of glory, that will but crackle a little in talk, and quickly extinguish.

And this may be done, observing the species of Mr. Sutton's intent, though varying "in individuo:" for it appears that he had in notion a triple good, a hospital, and a school, and maintaining of a preacher: which individuals refer to these three general heads; relief of poor, advancement of learning, and propagation of religion. Now, then, if I shall set before your majesty, in every of these three kinds, what it is that is most wanting in your kingdom; and what is like to be the most fruitful and effectual use of such a beneficence, and least like to be perverted; that, I think, shall be no ill scope of my labour, how meanly soever performed; for out of variety represented, election may be best grounded.

Concerning the relief of the poor; I hold some number of hospitals, with competent endowments, will do far more good than one hospital of an exorbitant greatness: for though the one course will be the more seen, yet the other will be the more felt. For if your majesty erect many, besides the observing the ordinary maxim, "Bonum, quo communius, eo melius," choice may be made of those towns and places where there is most need, and so the remedy may be distributed as the disease is dispersed. Again, greatness of relief, accumulated in one place, doth rather invite a swarm and surcharge of poor, than relieve those that are naturally bred in that place; like to ill-tempered medicines, that draw more humour to the part than they evacuate from it. But chiefly I rely upon the reason that I touched in the beginning, that in these great hospitals the revenues will draw the use, and not the use the revenues; and so, through the mass of the wealth, they will swiftly tumble down to a misemployment. And if any man say, that in the two hospitals in London there is a precedent of greatness concurring with good employment; let him consider that those hospitals have annual governors, that they are under the superior care and policy of such a state as the city of London; and, chiefly, that their revenues consist not upon certainties, but upon casualties and free gifts, which gifts would be withheld, if they appeared once to be perverted; so as it keepeth them in a continual good behaviour and awe to employ them aright; none of which points do match with the present case.

The next consideration may be, whether this intended hospital, as it hath a more ample endowment than other hospitals have, should not likewise work upon a better subject than other poor; as that it should be converted to the relief of maimed soldiers, decayed merchants, householders aged, and destitute churchmen, and the like; whose condition, being of a better sort than loose people and beggars, deserveth both a more liberal stipend and allowance, and some proper place of relief, not intermingled or coupled with the basest sort of poor; which project, though specious, yet, in my judgment, will not answer the designment in the event, in these our times. For certainly few men in any vocation, which have been somebody, and bear a mind somewhat according to the conscience and remembrance of that they have been, will ever descend to that condition, as to profess to live upon alms, and to become a corporation of declared beggars; but rather will choose to live obscurely, and as it were to hide themselves with some private friends: so that the end of such an institution will be, that it will make the place a receptacle of the worst, idlest, and most dissolute persons of every profession, and to become a cell of loiterers, and cast serving-men, and drunkards, with scandal rather than fruit to the commonwealth. And of this kind I can find but one example with us, which is the alms-knights of Windsor; which particular would give a man a small encouragement to follow that precedent.

Therefore the best effect of hospitals is, to make the kingdom, if it were possible, capable of that law, that there be no beggar in Israel: for it is that kind of people that is a burden, an eyesore, a scandal and seed of peril and tumult in the state. But chiefly it were to be wished, that such a beneficence towards the relief of the poor were so bestowed, as not only the mere and naked poor should be sustained, but, also, that the honest person which hath hard means to live, upon whom the poor are now charged, should be in some sort eased: for that were a work generally acceptable

to the kingdom, if the public hand of alms might spare the private hand of tax: and, therefore, of all other employments of that kind, I commend most houses of relief and correction, which are mixed hospitals; where the impotent person is relieved, and the sturdy beggar buckled to work; and the unable person also not maintained to be idle, which is ever joined with drunkenness and impurity, but is sorted with such work as he can manage and perform; and where the uses are not distinguished, as in other hospitals; whereof some are for aged and impotent, and some for children, and some for correction of vagabonds; but are general and promiscuous: so that they may take off poor of every sort from the country as the country breeds them: and thus the poor themselves shall find the provision, and other people the sweetness of the abatement of the tax. Now, if it be objected, that houses of correction in all places have not done the good expected, as it cannot be denied, but in most places they have done much good, it must be remembered that there is a great difference between that which is done by the distracted government of justices of peace, and that which may be done by a settled ordinance, subject to a regular visitation, as this may be. And, besides, the want hath been commonly in houses of correction of a competent and certain stock, for the materials of the labour, which in this case may be likewise supplied.

Concerning the advancement of learning, I do subscribe to the opinion of one of the wisest and greatest men of your kingdom: That for grammar schools, there are already too many, and, therefore, no providence to add where there is excess: for the great number of schools which are in your highness's realm, doth cause a want, and doth cause likewise an overflow; both of them inconvenient, and one of them dangerous. For by means thereof they find want in the country and towns, both of servants for husbandry, and apprentices for trade: and, on the other side, there being more scholars bred than the state can prefer and employ; and the active part of that life not bearing a proportion to the preparative, it must needs fall out, that many persons will be bred unfit for other vocations, and unprofitable for that in which they are brought up; which fills the realm full of indigent, idle, and wanton people, which are but "materia rerum novarum."

Therefore, in this point, I wish Mr. Sutton's intention were exalted a degree; that that which he meant for teachers of children, your majesty should make for teachers of men; wherein it hath been my ancient opinion and observation, that in the universities of this realm, which I take to be of the best endowed universities of Europe, there is nothing more wanting towards the flourishing state of learning, than the honourable and plentiful salaries of readers in arts and professions. In which point, as your majesty's bounty already hath made a beginning, so this occasic of God to make a proceeding. Surely the chair are as the parents in scie deserve to enjoy a condition not inferio children, that embrace the practical part; else no man will sit longer in the chair, than till he can walk to a better preferment: and it will come to pass as Virgil saith,

"Ut patrum invalidi referant jejunia nati."

For if the principal readers, through the meanness of their entertainment, be but men of superficial learning, and that they shall take their place but in passage, it will make the mass of sciences want the chief and solid dimension, which is depth; and to become but pretty and compendious habits of practice. Therefore, I could wish that in both the universities, the lectures as well of the three professions, divinity, law, and physic; as of the three heads of science, philosophy, arts of speech, and the mathematics; were raised in their pensions unto 100*l.* per annum apiece: which, though it be not near so great as they are in some other places, where the greatness of the reward doth whistle for the ablest men out of all foreign parts to supply the chair; yet it may be a portion to content a worthy and able man; if he be likewise contemplative in nature, as those spirits are that are fittest for lectures. Thus may learning in your kingdom be advanced to a farther height; learning, I say, which, under your majesty, the most learned of kings, may claim some degree of elevation.

Concerning propagation of religion, I shall in few words set before your majesty three propositions, none of them devices of mine own, otherwise than that I ever approved them; two of which have been in agitation of speech, and the third acted.

The first is a college for controversies, whereby we shall not still proceed single, but shall, as it were, double our files; which certainly will be found in the encounter.

The second is a receipt (I like not the word seminary, in respect of the vain vows, and implicit obedience, and other things tending to the perturbation of states, involved in that term) for converts to the reformed religion, either of youth or otherwise; for I doubt not but there are in Spain, Italy, and other countries of the Papists, many whose hearts are touched with a sense of those corruptions, and an acknowledgment of a better way; which grace is many times smothered and choked, through a worldly consideration of necessity and want; men not knowing where to have succour and refuge. This likewise I hold a work of great piety, and a work of great consequence; that we also may be wise in our generation; and that the watchful and silent night may be used as well for sowing of good seed, as of tares.

The third is, the imitation of a memorable and religious act of Queen Elizabeth; who, finding a part of Lancashire to be extremely backward a

religion, and the benefices swallowed up in impropriations, did, by decree in the duchy, erect four stipends of 100*l.* per annum apiece for preachers well chosen to help the harvest, which have done a great deal of good in the parts where they have laboured. Neither do there want other corners in the realm, that would require for a time the like extraordinary help.

Thus have I briefly delivered unto your majesty mine opinion touching the employment of this charity; whereby that mass of wealth, which was in the owner little better than a stack or heap of muck, may be spread over your kingdom to many fruitful purposes; your majesty planting and watering, and God giving the increase.

CERTAIN OBSERVATIONS UPON A LIBEL

PUBLISHED THIS PRESENT YEAR, 1592,

ENTITLED

A DECLARATION OF THE TRUE CAUSES OF THE GREAT TROUBLES PRESUPPOSED TO BE INTENDED AGAINST THE REALM OF ENGLAND.

It were just and honourable for princes being in wars together, that howsoever they prosecute their quarrels and debates by arms and acts of hostility; yea, though the wars be such, as they pretend the utter ruin and overthrow of the forces and states one of another, yet they so limit their passions as they preserve two things sacred and inviolable; that is, the life and good name each of other. For the wars are no massacres and confusions; but they are the highest trials of right; when princes and states, that acknowledge no superior upon earth, shall put themselves upon the justice of God for the deciding of their controversies by such success, as it shall please him to give on either side. And as in the process of particular pleas between private men, all things ought to be ordered by the rules of civil laws; so in the proceedings of the war nothing ought to be done against the law of nations, or the law of honour; which laws have ever pronounced these two sorts of men, the one, conspirators against the persons of princes; the other, libellers against their good fame; to be such enemies of common society as are not to be cherished, no, not by enemies. For in the examples of times which were less corrupted, we find that when, in the greatest heats and extremities of wars, there have been made offers of murderous and traitorous attempts against the person of a prince to the enemy, they have been not only rejected, but also revealed: and in like manner, when dishonourable mention hath been made of a prince before an enemy prince, by some that have thought therein to please his humour, he hath showed himself, contrariwise, utterly distasted therewith, and been ready to contest for the honour of an enemy.

According to which noble and magnanimous kind of proceeding, it will be found, that in the whole course of her majesty's proceeding with the King of Spain, since the amity interrupted, there was never any project by her majesty, or any of her ministers, either moved or assented unto, for the taking away of the life of the said king: neither hath there been any declaration or writing of estate, no, nor book allowed, wherein his honour hath been touched or taxed, otherwise than for his ambition; a point which is necessarily interlaced with her majesty's own justification. So that no man needeth to doubt but that those wars are grounded, upon her majesty's part, upon just and honourable causes, which have so just and honourable a prosecution; considering it is a much harder matter when a prince is entered into wars to hold respect then, and not to be transported with passion, than to make moderate and just resolutions in the beginnings.

But now if a man look on the other part, it will appear that, rather, as it is to be thought, by the solicitation of traitorous subjects, which is the only poison and corruption of all honourable war between foreigners, or by the presumption of his agents and ministers, than by the proper inclination of that king, there hath been, if not plotted and practised, yet at the least comforted, conspiracies against her majesty's sacred person: which, nevertheless, God's goodness hath used and turned, to show by such miraculous discoveries, into how near and precious care and custody it hath pleased him to receive her majesty's life and preservation. But in the other point it is strange what a number of libellous and defamatory books and writings, and in what variety, with what art and cunning handled, have been allowed to pass through

the world in all languages against her majesty and her government; sometimes pretending the gravity and authority of church stories to move belief; sometimes formed into remonstrances and advertisements of estate to move regard; sometimes presented as it were in tragedies of the persecutions of Catholics to move pity; sometimes contrived into pleasant pasquils and satires to move sport: so as there is no shape whereinto these fellows have not transformed themselves; nor no humour nor affection in the mind of man to which they have not applied themselves; thereby to insinuate their untruths and abuses to the world. And, indeed, let a man look into them, and he shall find them the only triumphant lies that ever were confuted by circumstances of time and place; confuted by contrariety in themselves, confuted by the witness of infinite persons that live yet, and have had particular knowledge of the matters; but yet avouched with such asseveration, as if either they were fallen into that strange disease of the mind, which a wise writer describeth in these words, "fingunt simul creduntque;" or as if they had received it as a principal precept and ordinance of their seminaries, "audacter calumniari, semper aliquid hæret;" or as if they were of the race which in old time were wont to help themselves with miraculous lies. But when the cause of this is entered into, namely, that there passeth over out of this realm, a number of eager and unquiet scholars, whom their own turbulent and humourous nature presseth out to seek their adventures abroad; and that, on the other side, they are nourished rather in listening after news and intelligences, and in whisperings, than in any commendable learning; and after a time, when either their necessitous estate, or their ambitious appetites importune them, they fall on devising how to do some acceptable service to that side which maintaineth them; so as ever when their credit waxeth cold with foreign princes, or that their pensions are ill paid, or some preferment is in sight at which they level, straightways out cometh a libel, pretending thereby to keep in life the party, which within the realm is contrary to the state, wherein they are as wise as he that thinketh to kindle a fire by blowing the dead ashes, when, I say, a man looketh into the cause and ground of this plentiful yield of libels, he will cease to marvel, considering the concurrence which is, as well in the nature of the seed, as in the travel of tilling and dressing; yea, and in the fitness of the season for the bringing up of those infectious weeds.

But to verify the saying of our Saviour, "non est discipulus super magistrum;" as they have sought to deprave her majesty's government in herself, so have they not forgotten to do the same in her principal servants and counsellors; thinking, belike, that as the immediate invectives against her majesty do best satisfy the malice of the foreigner, so the slander and calumniation of her principal counsellors agreed best with the humours of some malcontents within the realm: imagining also, that it was like they should be more scattered here, and freelier dispersed; and also should be less odious to those foreigners which were not merely partial and passionate, who have for the most part in detestation the traitorous libellings of subjects directly against their natural prince.

Amongst the rest in this kind, there hath been published this present year of 1592, a libel that giveth place to none of the rest in malice and untruths; though inferior to most of them in penning and style; the author having chosen the vein of a Lucianist, and yet being a counterfeit even in that kind. This libel is entitled, "A declaration of the true causes of the great troubles presupposed to be intended against the realm of England;" and hath a semblance as if it were bent against the doings of her majesty's ancient and worthy counsellor, the Lord Burleigh; whose carefulness and pains her majesty hath used in her counsels and actions of this realm for these thirty-four years' space, in all dangerous times, and amidst many and mighty practices; and with such success as our enemies are put still to their paper-shot of such libels as these; the memory of whom will remain in this land, when all these libels shall be extinct and forgotten; according to the Scripture, "Memoria justi cum laudibus, at impiorum nomen putrescet." But it is more than evident, by the parts of the same book, that the author's malice was to her majesty and her government, as may especially appear in this, that he charged not his lordship with any particular actions of his private life, such power had truth, whereas the libels made against other counsellors have principally insisted upon that part: but hath only wrested and detorted such actions of state, as in times of his service have been managed; and, depraving them, hath ascribed and imputed to him the effects that have followed; indeed, to the good of the realm, and the honour of her majesty, though sometimes to the provoking of the malice, but abridging of the power and means of desperate and incorrigible subjects.

All which slanders, as his lordship might justly despise, both for their manifest untruths, and for the baseness and obscurity of the author; so, nevertheless, according to the moderation which his lordship useth in all things, never claiming the privilege of his authority, when it is question of satisfying the world, he hath been content that they be not passed over altogether in silence; whereupon I have, in particular duty to his lordship, amongst others that do honour and love his lordship, and that have diligently observed his actions, and in zeal of truth, collected, upon the reading of the said libel, certain observations

not in form of a just answer, lest I should fall into the error whereof Solomon speaketh thus, "Answer not a fool in his own kind, lest thou also be like him;" but only to discover the malice, and to reprove and convict the untruths thereof.

The points, that I have observed upon the reading of this libel, are these following:

I. Of the scope or drift of the libeller.

II. Of the present estate of this realm of England, whether it may be truly vouched to be prosperous or afflicted.

III. Of the proceedings against the pretended Catholics, whether they have been violent, or moderate, and necessary.

IV. Of the disturbance of the quiet of Christendom, and to what causes it may be justly imputed.

V. Of the cunning of the libeller, in palliation of his malicious invective against her majesty and the state, with pretence of taxing only the actions of the Lord Burleigh.

VI. Certain true general notes upon the actions of the Lord Burleigh.

VII. Of divers particular untruths and abuses dispersed through the libel.

VIII. Of the height of impudency that these men are grown into, in publishing and avouching untruths; with a particular recital of some of them for an essay.

1. Of the scope or drift of the libeller.

It is good advice, in dealing with cautelous and malicious persons, whose speech is ever at distance with their meanings, "non quid dixerint, sed quo spectarint, videndum:" a man is not to regard what they affirm, or what they hold; but what they would convey under their pretended discovery, and what turn they would serve. It soundeth strangely in the ears of an Englishman, that the miseries of the present state of England exceed them of former times whatsoever. One would straightway think with himself, doth this man believe what he saith? Or, not believing it, doth he think it possible to make us believe it? Surely, in my conceit, neither of both; but his end, no doubt, was to round the pope and the King of Spain in the ear, by seeming to tell a tale to the people of England. For such books are ever wont to be translated into divers languages; and, no doubt, the man was not so simple as to think he could persuade the people of England the contrary of what they taste and feel. But he thought he might better abuse the states abroad, if he directed his speech to them who could best convict him, and disprove him if he said untrue; so that, as Livy saith in the like case, "Ætolos magis, coram quibus verba facerent, quam ad quos, pensi habere;" That the Ætolians, in their tale, did more respect those who did overhear them, than those to whom they directed their speech: so in this manner this fellow cared not to be counted a liar by all English, upon price of deceiving of Spain and Italy; for it must be understood, that it hath been the general practice of this kind of men many years, of the one side, to abuse the foreign estates, by making them believe that all is out of joint and ruinous here in England, and that there is great part ready to join with the invader; and on the other side, to make the evil subjects of England believe of great preparations abroad, and in great readiness to be put in act, and so to deceive on both sides: and this I take to be his principal drift. So, again, it is an extravagant and incredible conceit, to imagine that all the conclusions and actions of estate which have passed during her majesty's reign, should be ascribed to one counsellor alone; and to such a one as was never noted for an imperious or overruling man; and to say, that though he carried them not by violence, yet he compassed them by device, there is no man of judgment that looketh into the nature of these times, but will easily descry that the wits of these days are too much refined for any man to walk invisible, or to make all the world his instruments; and, therefore, no, not in this point assuredly, the libeller spake as he thought; but this he foresaw, that the imputation of cunning doth breed suspicion, and the imputation of greatness and sway doth breed envy; and therefore finding where he was most wrong, and by whose policy and experience their plots were most crossed, the mark he shot at was to see whether he could heave at his lordship's authority, by making him suspected to the queen, or generally odious to the realm; knowing well enough for the one point, that there are not only jealousies, but certain revolutions in princes' minds: so that it is a rare virtue in the rarest princes to continue constant to the end in their favours and employments. And knowing for the other point, that envy ever accompanieth greatness, though never so well deserved: and that his lordship hath always marched a round and a real course in service; and as he hath not moved envy by pomp and ostentation, so hath he never extinguished it by any popular or insinuative carriage of himself; and this no doubt was his second drift.

A third drift was, to assay if he could supplant and weaken, by this violent kind of libelling, and turning the whole imputation upon his lordship, his resolution and courage; and to make him proceed more cautelously, and not so thoroughly and strongly against them, knowing his lordship to be a politic man, and one that hath a great stake to lose.

Lastly, lest, while I discover the cunning and art of this fellow, I should make him wiser than he was, I think a great part of this book was passion; "difficile est tacere, cum doleas." The humours of these men being of themselves eager

and fierce, have, by the abort and blasting of their hopes, been blinded and enraged. And surely this book is, of all that sort that have been written, of the meanest workmanship; being fraught-ed with sundry base scoffs, and cold amplifications, and other characters of despite; but void of all judgment or ornament.

II. Of the present estate of this realm of England, whether it may be truly avouched to be prosperous or afflicted.

The benefits of almighty God upon this land, since the time that in his singular providence he led as it were by the hand, and placed in the kingdom, his servant our queen, Elizabeth, are such as, not in boasting, or in confidence of ourselves, but in praise of his holy name, are worthy to be both considered and confessed, yea, and registered in perpetual memory: notwithstanding, I mean not after the manner of a panegyric to extol the present time: it shall suffice only that those men, that through the gall and bitterness of their own heart have lost their taste and judgment, and would deprive God of his glory, and us of our senses, in affirming our condition to be miserable, and full of tokens of the wrath and indignation of God, be reproved.

If, then, it be true, that "nemo est miser, aut felix, nisi comparatus;" whether we shall, keeping ourselves within the compass of our own island, look into the memories of times past, or at this present time take a view of other states abroad in Europe, we shall find that we need not give place to the happiness either of ancestors or neighbours. For if a man weigh well all the parts of state and religion, laws, administration of justice, policy of government, manners, civility, learning and liberal sciences, industry and manual arts, arms and provisions of wars for sea and land, treasure, traffic, improvement of the soil, population, honour and reputation, it will appear that, taking one part with another, the state of this nation was never more flourishing.

It is easy to call to remembrance, out of histories, the kings of England which have in more ancient times enjoyed greatest happiness; besides her majesty's father and grandfather, that reigned in rare felicity, as is fresh in memory. They have been King Henry I., King Henry II., King Henry III., King Edward I., King Edward III., King Henry V. All which have been princes of royal virtue, great felicity, and famous memory. But it may be truly affirmed, without derogation to any of these worthy princes, that whatsoever we find in libels, there is not to be found in the English chronicles, a king that hath, in all respects laid together, reigned with such felicity as her majesty hath done. For as for the first three Henrys, the first came in too soon after a conquest; the second too soon after an usurpation; and the third too soon after a league, or barons' war, to reign with security and contentation. King Henry I. also had unnatural wars with his brother Robert, wherein much nobility was consumed: he had therewithal tedious wars in Wales; and was not without some other seditions and troubles; as, namely, the great contestation of his prelates. King Henry II., his happiness was much deformed by the revolt of his son Henry, after he had associated him, and of his other sons. King Henry III., besides his continual wars in Wales, was, after forty-four years' reign, unquieted with intricate commotions of his barons; as may appear by the mad parliament held at Oxford, and the acts thereupon ensuing. His son Edward I. had a more flourishing time than any of the other; came to his kingdom at ripe years, and with great reputation, after his voyage into the Holy Land, and was much loved and obeyed, contrived his wars with great judgment; first having reclaimed Wales to a settled allegiance, and being upon the point of uniting Scotland. But yet I suppose it was more honour for her majesty to have so important a piece of Scotland in her hand, and the same with such justice to render up, than it was for that worthy king to have advanced in such forwardness the conquest of that nation. And for King Edward III., his reign was visited with much sickness and mortality, so as they reckoned in his days three several mortalities; one in the twenty-second year, another in the thirty-fifth year, and the last in the forty-third year of his reign; and being otherwise victorious and in prosperity, was by that only cross more afflicted, than he was by the other prosperities comforted. Besides, he entered hardly; and, again, according to the verse, "cedebant ultima primis," his latter times were not so prosperous. And for King Henry V., as his success was wonderful, so he wanted continuance; being extinguished after ten years' reign in the prime of his fortunes.

Now, for her majesty, we will first speak of the blessing of continuance, as that which wanted in the happiest of these kings; and is not only a great favour of God unto the prince, but also a singular benefit unto the people; for that sentence of the Scripture, "misera natio cum multi sunt principes ejus," is interpreted not only to extend to divisions and distractions in government, but also to frequent changes in succession; considering, that the change of a prince bringeth in many charges, which are harsh and unpleasant to a great part of the subjects. It appeareth, then, that of the line of five hundred and fourscore years, and more, containing the number of twenty-two kings, God hath already prolonged her majesty's reign to exceed sixteen of the said two-and-twenty; and by the end of this present year, which God prosper, she shall attain to be equal with two more: during which time there have deceased four emperors, as many French kings; twice so

many bishops of Rome. Yea, every state in Christendom, except Spain, have received sundry successions. And for the King of Spain, he is waxed so infirm, and thereby so retired, as the report of his death serveth for every year's news: whereas her majesty, thanks be given to God, being nothing decayed in vigour of health and strength, was never more able to supply and sustain the weight of her affairs, and is, as far as standeth with the dignity of her majesty's royal state, continually to be seen, to the great comfort and heart-ease of her people.

Secondly, we will mention the blessing of health: I mean generally of the people, which was wanting in the reign of another of these kings; which else deserved to have the second place in happiness, which is one of the great favours of God towards any nation. For as there be three scourges of God, war, famine, and pestilence; so are there three benedictions, peace, plenty, and health. Whereas, therefore, this realm hath been visited in times past with sundry kinds of mortalities, as pestilences, sweats, and other contagious diseases, it is so, that in her majesty's times, being of the continuance aforesaid, there was only, towards the beginning of her reign, some sickness, between June and February, in the city; but not dispersed into any other part of the realm, as was noted; which we call yet the great plague; because that, though it was nothing so grievous and so sweeping as it hath been sundry times heretofore, yet it was great in respect of the health which hath followed since; which hath been such, especially of late years, as we began to dispute and move questions of the causes whereunto it should be ascribed, until such time as it pleased God to teach us that we ought to ascribe it only to his mercy, by touching us a little this present year, but with a very gentle hand; and such as it hath pleased him since to remove. But certain it is, for so many years together, notwithstanding the great pestering of people in houses, the great multitude of strangers, and the sundry voyages by seas, all of which have been noted to be causes of pestilence, the health universal of the people was never so good.

The third blessing is that which all the politic and fortunate kings before recited have wanted; that is, peace: for there was never foreigner since her majesty's reign, by invasion or incursion of moment, that took any footing within the realm of England. One rebellion there hath been only, but such a one as was repressed within the space of seven weeks, and did not waste the realm so much as by the destruction or depopulation of one poor town. And for wars abroad, taking in those of Leith, those of Newhaven, the second expedition into Scotland, the wars of Spain, which I reckon from the year eighty-six or eighty-seven, (before which time neither had the King of Spain withdrawn his ambassadors here residing; neither had her majesty received into protection the United Provinces of the Low Countries,) and the aid of France; they have not occupied in time a third part of her majesty's reign; nor consumed past two of any noble house; whereof France took one, and Flanders another; and very few besides of quality or appearance. They have scarce mowed down the overcharge of the people within the realm. It is therefore true, that the kings aforesaid, and others her majesty's progenitors, have been victorious in their wars, and have made many famous and memorable voyages and expeditions into sundry parts; and that her majesty, contrariwise, from the beginning, put on a firm resolution to content herself within those limits of her dominions which she received, and to entertain peace with her neighbour princes; which resolution she hath ever since, notwithstanding she hath had rare opportunities, just claims and pretences, and great and mighty means, sought to continue. But if this be objected to be the less honourable fortune; I answer, that ever amongst the heathen, who held not the expense of blood so precious as Christians ought to do, the peaceable government of Augustus Cæsar was ever as highly esteemed as the victories of Julius his uncle; and that the name of "pater patriæ" was ever as honourable as that of "propagator imperii." And this I add further, that during this inward peace of so many years in the actions of war before mentioned, which her majesty, either in her own defence or in just and honourable aids, hath undertaken, the service hath been such as hath carried no note of a people, whose militia hath degenerated through long peace; but hath every way answered the ancient reputation of the English arms.

The fourth blessing is plenty and abundance: and, first, for grain and all victuals, there cannot be more evident proof of the plenty than this: that whereas England was wont to be fed by other countries from the east, it sufficeth now to feed other countries; so as we do many times transport and serve sundry foreign countries; and yet there was never the like multitude of people to eat it within the realm. Another evident proof thereof may be, that the good yields of corn which have been, together with some toleration of vent, hath of late time invited and enticed men to break up more ground, and to convert it to tillage, than all the penal laws for that purpose made and enacted could ever by compulsion effect. A third proof may be, that the prices of grain and victual were never of late years more reasonable. Now, for arguments of the great wealth in all other respects, let the points following be considered.

There was never the like number of fair and stately houses as have been built and set up from

the ground since her majesty's reign; insomuch, that there have been reckoned in one shire that is not great, to the number of thirty-three, which have been all new built within that time; and whereof the meanest was never built for two thousand pounds.

There were never the like pleasures of goodly gardens and orchards, walks, pools, and parks, as do adorn almost every mansion-house.

There was never the like number of beautiful and costly tombs, and monuments which are erected in sundry churches, in honourable memory of the dead.

There never was the like quantity of plate, jewels, sumptuous moveables, and stuff, as is now within the realm.

There was never the like quantity of waste and unprofitable ground, inned, reclaimed, and improved.

There was never the like husbanding of all sorts of grounds, by fencing, manuring, and all kinds of good husbandry.

The towns were never better built nor peopled; nor the principal fairs and markets ever better customed or frequented.

The commodities and ease of rivers cut by hand, and brought into a new channel; of piers that have been built; of waters that have been forced and brought against the ground, were never so many.

There was never so many excellent artificers, nor so many new handicrafts used and exercised; nor new commodities made within the realm; sugar, paper, glass, copper, divers silks, and the like.

There was never such complete and honourable provision of horse, armour, weapons, ordnance of the war.

The fifth blessing hath been the great population and multitude of families increased within her majesty's days: for which point I refer myself to the proclamations of restraint of building in London, the inhibition of inmates of sundry cities, the restraint of cottages by act of parliament, and sundry other tokens of record of the surcharge of people.

Besides these parts of a government, blessed from God, wherein the condition of the people hath been more happy in her majesty's times, than in the times of her progenitors, there are certain singularities and particulars of her majesty's reign; wherein I do not say, that we have enjoyed them in a more ample degree and proportion than in former ages, as it hath fallen out in the points before mentioned, but such as were in effect unknown and untasted heretofore. As, first, the purity of religion, which is a benefit inestimable, and was in the time of all former princes, until the days of her majesty's father of famous memory, unheard of. Out of which purity of religion have since ensued, beside the principal effect of the true knowledge and worship of God, three points of great consequence unto the civil estate.

One, the stay of a mighty treasure within the realm, which in foretimes was drawn forth to Rome. Another, the dispersion and distribution of those revenues, amounting to a third part of the land of the realm, and that of the goodliest and the richest sort, which heretofore was unprofitably spent in monasteries, into such hands as by whom the realm receiveth at this day service and strength; and many great houses have been set up and augmented. The third, the managing and enfranchising of the regal dignity from the recognition of a foreign superior. All which points, though begun by her father, and continued by her brother, were yet, nevertheless, after an eclipse or intermission, restored and reestablished by her majesty's self.

Secondly, the fineness of money: for as the purging away of the dross of religion, the heavenly treasure, was common to her majesty with her father and her brother, so the purging of the base money, the earthly treasure, hath been altogether proper to her majesty's own times; whereby our moneys bearing the natural estimation of the stamp or mark, both every man resteth assured of his own value, and free from the losses and deceits which fall out in other places upon the rising and falling of moneys.

Thirdly, the might of the navy and augmentation of the shipping of the realm; which, by politic constitutions for maintenance of fishing, and the encouragement and assistance given to the undertakers of new discoveries and trades by sea, is so advanced, as this island is become, as the natural site thereof deserveth, the lady of the sea.

Now, to pass from the comparison of time to the comparison of place, we may find in the states abroad cause of pity and compassion in some; but of envy or emulation in none; our condition being, by the good favour of God, not inferior to any.

The kingdom of France, which, by reason of the seat of the empire of the west, was wont to have the precedence of the kingdoms of Europe, is now fallen into those calamities, that, as the prophet saith, "From the crown of the head to the sole of the foot, there is no whole place." The divisions are so many, and so intricate, of Protestants and Catholics, royalists and leaguers, Bourbonists and Lorainists, patriots and Spanish; as it seemeth God hath some great work to bring to pass upon that nation: yea, the nobility divided from the third estate, and the towns from the field. All which miseries, truly to speak, have been wrought by Spain and the Spanish faction.

The Low Countries, which were, within the age of a young man, the richest, the best peopled,

and the best built plots of Europe, are in such estate, as a country is like to be in, that hath been the seat of thirty years' war: and although the sea provinces be rather increased in wealth and shipping than otherwise; yet they cannot but mourn for their distraction from the rest of their body.

The kingdom of Portugal, which of late times, through their merchandising and places in the East Indies, was grown to be an opulent kingdom, is now at the last, after the unfortunate journey of Afric, in that state as a country is like to be, that is reduced under a foreigner by conquest; and such a foreigner as hath his competitor in title, being a natural Portugal and no stranger; and having been once in possession, yet in life: whereby his jealousy must necessarily be increased, and through his jealousy their oppression: which is apparent, by the carrying of many noble families out of their natural countries to live in exile, and by putting to death a great number of noblemen, naturally born to have been principal governors of their countries. These are three afflicted parts of Christendom; the rest of the states enjoy either prosperity or tolerable condition.

The kingdom of Scotland, though, at this present, by the good regiment and wise proceeding of the king, they enjoy good quiet; yet since our peace it hath passed through no small troubles, and remaineth full of boiling and swelling humours; but like, by the maturity of the said king every day increasing, to be repressed.

The kingdom of Poland is newly recovered out of great wars about an ambiguous election. And, besides, is a state of that composition, that their king being elective, they do commonly choose rather a stranger than one of their own country: a great exception to the flourishing estate of any kingdom.

The kingdom of Swedeland, besides their foreign wars upon their confines, the Muscovites and the Danes, hath been also subject to divers intestine tumults and mutations, as their stories do record.

The kingdom of Denmark hath had good times, especially by the good government of the late king, who maintained the profession of the gospel; but yet greatly giveth place to the kingdom of England, in climate, wealth, fertility, and many other points, both of honour and strength.

The estates of Italy, which are not under the dominion of Spain, have had peace equal in continuance with ours, except in regard of that which hath passed between them and the Turk, which hath sorted to their honour and commendation; but yet they are so bridled and overawed by the Spaniard, that possesseth the two principal members thereof, and that in the two extreme parts, as they be like quillets of freehold, being intermixed in the midst of a great honour or lordship; so as their quiet is intermingled, not with jealousy alone, but with restraint.

The states of Germany have had for the most part peaceable times; but yet they yield to the state of England; not only in the great honour of a great kingdom, they being of a mean style and dignity, but also in many other respects, both of wealth and policy.

The state of Savoy having been in the old duke's time governed in good prosperity, hath since (notwithstanding their new great alliance with Spain, whereupon they waxed insolent, to design to snatch up some piece of France, after the dishonourable repulse from the siege of Geneva) been often distressed by a particular gentleman of Dauphiny; and at this present day the duke feeleth, even in Piedmont beyond the mountains, the weight of the same enemy; who hath lately shut up his gates and common entries between Savoy and Piedmont.

So as hitherto I do not see but that we are as much bound to the mercies of God as any other nation; considering that the fires of dissension and oppression in some parts of Christendom, may serve us for lights to show us our happiness; and the good estates of other places, which we do congratulate with them for, is such, nevertheless, as doth not stain and exceed ours; but rather doth still leave somewhat, wherein we may acknowledge an ordinary benediction of God.

Lastly, we do not much emulate the greatness and glory of the Spaniards; who, having not only excluded the purity of religion, but also fortified against it, by their device of the inquisition, which is a bulwark against the entrance of the truth of God; having, in recompense of their new purchase of Portugal, lost a great part of their ancient partrimonies of the Low Countries, being of far greater commodity and value, or at the least holding part thereof in such sort as most of their other revenues are spent there upon their own; having lately, with much difficulty, rather smoothed and skinned over, than healed and extinguished the commotions of Arragon; having rather sowed troubles in France, than reaped assured fruit thereof unto themselves; having from the attempt of England received scorn and disreputation; being at this time with the states of Italy rather suspected than either loved or feared; having in Germany, and elsewhere, rather much practice, than any sound intelligence or amity; having no such clear succession as they need object, and reproach the uncertainty thereof unto another nation; have in the end won a reputation rather of ambition than justice; and, in the pursuit of their ambition, rather of much enterprising than of fortunate achieving; and in their enterprising, rather of doing things by treasure and expense, than by forces and valour.

Now that I have given the reader a taste of England respectively, and in comparison of the times past, and of the states abroad, I will descend to examine the libeller's own divisions, whereupon let the world judge how easily and clean this ink, which he hath cast in our faces, is washed off.

The first branch of the pretended calamities of England, is the great and wonderful confusion which, he saith, is in the state of the church; which is subdivided again into two parts: the one, the prosecutions against the Catholics: the other, the discords and controversies amongst ourselves: the former of which two parts I have made an article by itself; wherein I have set down a clear and simple narration of the proceedings of state against that sort of subjects; adding this by the way, that there are two extremities in state concerning the causes of faith and religion; that is to say, the permission of the exercises of more religions than one, which is a dangerous indulgence and toleration; the other is the entering and sifting into men's consciences when no overt scandal is given, which is rigorous and strainable inquisition; and I avouch the proceedings towards the pretended Catholics to have been a mean between these two extremities, referring the demonstration thereof unto the aforesaid narration in the articles following.

Touching the division in our church, the libeller affirmeth that the protestantical Calvinism, for so it pleaseth him with very good grace to term the religion with us established, is grown contemptible, and detected of idolatry, heresy, and many other superstitious abuses, by a purified sort of professors of the same gospel. And this contention is yet grown to be more intricate, by reason of a third kind of gospellers, called Brownists; who, being directed by the great fervour of the unholy ghost, do expressly affirm, that the protestantical Church of England is not gathered in the name of Christ, but of Antichrist; and that if the prince or magistrate under her do refuse or defer to reform the church, the people may, without her consent, take the reformation into their own hands: and hereto he addeth the fanatical pageant of Hacket. And this is the effect of this accusation in this point.

For answer whereunto, first, it must be remembered that the church of God hath been in all ages subject to contentions and schisms: the tares were not sown but where the wheat was sown before. Our Saviour Christ delivered it for an ill note to have outward peace; saying, "when a strong man is in possession of the house," meaning the devil, "all things are in peace." It is the condition of the church to be ever under trials; and there are but two trials; the one of persecution, the other of scandal and contention; and when the one ceaseth, the other succeedeth: nay, there is scarce any one epistle of St. Paul's unto the churches, but containeth some reprehension of unnecessary and schismatical controversies. So, likewise, in the reign of Constantine the Great, after the time that the church had obtained peace from persecution, straight entered sundry questions and controversies, about no less matters than the essential parts of the faith, and the high mysteries of the Trinity. But reason teacheth us, that in ignorance and implied belief it is easy to agree, as colours agree in the dark: or if any country decline into atheism, then controversies wax dainty, because men do think religion scarce worth the falling out for; so as it is weak divinity to account controversies an ill sign in the church.

It is true that certain men, moved with an inconsiderate detestation of all ceremonies or orders, which were in use in the time of the Roman religion, as if they were without difference superstitious or polluted, and led with an affectionate imitation of the government of some Protestant churches in foreign states; have sought by books and preaching, indiscreetly, and sometimes undutifully, to bring in an alteration in the external rites and policy of the church; but neither have the grounds of the controversies extended unto any point of faith; neither hath the pressing and prosecution exceeded, in the generality, the nature of some inferior contempts: so as they have been far from heresy and sedition, and therefore rather offensive than dangerous to the church or state.

And as for those which we call Brownists, being, when they were at the most, a very small number of very silly and base people, here and there in corners dispersed, they are now, thanks be to God, by the good remedies that have been used, suppressed and worn out; so as there is scarce any news of them. Neither had they been much known at all, nad not Brown their leader written a pamphlet, wherein, as it came into his head, he inveighed more against logic and rhetoric, than against the state of the church, which writing was much read; and had not also one Barrow, being a gentleman of a good house, but one that lived in London at ordinaries, and there learned to argue in table talk, and so was very much known in the city and abroad, made a leap from a vain and libertine youth, to a preciseness in the highest degree; the strangeness of which alteration made him very much spoken of: the matter might long before have breathed out. And here I note an honesty and discretion in the libeller, which I note nowhere else; in that he did forbear to lay to our charge the sect of the Family of Love; for, about twelve years since, there was creeping in, in some secret places of the realm, indeed a very great heresy, derived from the Dutch, and named as was before said; which since, by the good blessing of God, and by the good strength of our church, is banished and

extinct. But so much we see, that the diseases wherewith our church hath been visited, whatsoever these men say, have either not been malign and dangerous, or else they have been as blisters in some small ignoble part of the body, which have soon after fallen and gone away. For such also was the phrenetical and fanatical, for I mean not to determine it, attempt of Hacket, who must needs have been thought a very dangerous heretic, that could never get but two disciples; and those, as it should seem, perished in their brain; and a dangerous commotioner, that in so great and populous a city as London is, could draw but those same two fellows, whom the people rather laughed at as a May-game, than took any heed of what they did or said: so as it was very true that an honest poor woman said, when she saw Hacket out of a window pass to his execution; said she to herself, "It was foretold that in the latter days there should come those that have deceived many; but in faith thou hast deceived but few."

But it is manifest untruth which the libeller setteth down, that there hath been no punishment done upon those which in any of the foresaid kinds have broken the laws, and disturbed the church and state; and that the edge of the law hath been only turned upon the pretended Catholics: for the examples are very many, where, according to the nature and degree of the offence, the correction of such offenders hath not been neglected.

These be the great confusions whereof he hath accused our church, which I refer to the judgment of an indifferent and understanding person, how true they be: my meaning is not to blanch or excuse any fault of our church; nor, on the other side, to enter into commemoration, how flourishing it is in great and learned divines, or painful and excellent preachers; let men have the reproof of that which is amiss, and God the glory of that which is good. And so much for the first branch.

In the second branch, he maketh great musters and shows of the strength and multitude of the enemies of this state; declaring in what evil terms and correspondence we stand with foreign states, and how desolate and destitute we are of friends and confederates; doubting, belike, how he should be able to prove and justify his assertion touching the present miseries, and, therefore, endeavouring at the least to maintain that the good estate which we enjoy is yet made somewhat bitter by reason of many terrors and fears. Whereupon, entering into the consideration of the security wherein, not by our policy, but by the good providence and protection of God, we stand at this time, I do find it to be a security of that nature and kind, which Iphicrates the Athenian did commend; who being a commissioner to treat with the state of Sparta upon conditions of peace, and hearing the other side make many propositions touching security, interrupted them, and told them, there was but one manner of security whereupon the Athenians could rest; which was, if the deputies of the Lacedæmonians could make it plain unto them, that, after these and these things parted withal, the Lacedæmonians should not be able to hurt them, though they would. So it is with us, as we have not justly provoked the hatred or enmity of any other state, so, howsoever that be, I know not at this time the enemy that hath the power to offend us, though he had the will.

And whether we have given just cause of quarrel or offence, it shall be afterwards touched in the fourth article, touching the true cause of the disturbance of the quiet of Christendom, as far as it is fit to justify the actions of so high a prince upon the occasion of such a libel as this. But now concerning the power and force of any enemy, I do find that England hath sometimes apprehended with jealousy the confederation between France and Scotland; the one being upon the same continent that we are, and breeding a soldier of puissance and courage, not much differing from the English: the other, a kingdom very opulent, and thereby able to sustain wars, though at very great charge; and having a brave nobility; and being a near neighbour. And yet of this conjunction there never came any offence of moment: but Scotland was ever rather used by France as a diversion of an English invasion upon France, than as a commodity of a French invasion upon England. I confess, also, that since the unions of the kingdom of Spain, and during the time the kingdom of France was in his entire, a conjunction of those two potent kingdoms against us might have been of some terror to us. But now it is evident, that the state of France is such as both those conjunctions are become impossible: it resteth that either Spain with Scotland should offend us, or Spain alone. For Scotland, thanks be to God, the amity and intelligence is so sound and secret between the two crowns, being strengthened by consent in religion, nearness of blood, and continual good offices reciprocally on either side, as the Spaniard himself, in his own plot, thinketh it easier to alter and overthrow the present state of Scotland than to remove and divide it from the amity of England. So as it must be Spain alone that we should fear, which should seem, by reason of its spacious dominions, to be a great overmatch. The conceit whereof maketh me call to mind the resemblance of an ancient writer in physic; who, labouring to persuade that a physician should not doubt sometimes to purge his patient, though he seem very weak, entereth into a distinction of weakness; and saith, there is a weakness of spirit, and a weakness of body; the latter whereof he compareth unto a man that were otherwise very strong, but had a great pack on his neck, so great as made him double again, so as one might thrust him down with his finger: which similitude and distinction both may be fitly applied to matter of state; for some states are

weak through want of means, and some weak through excess of burden; in which rank I do place the state of Spain, which having outcompassed itself in embracing too much; and being itself but a barren seed-plot of soldiers, and much decayed and exhausted of men by the Indies, and by continual wars; and as to the state of their treasure, being indebted and engaged before such times as they waged so great forces in France, and, therefore, much more since, is not in brief an enemy to be feared by a nation seated, manned, furnished, and policed as is England.

Neither is this spoken by guess, for the experience was substantial enough, and of fresh memory in the late enterprise of Spain upon England; what time all that goodly shipping, which in that voyage was consumed, was complete; what time his forces in the Low Countries were also full and entire; which now are wasted to a fourth part; what time also he was not entangled with the matters of France, but was rather like to receive assistance than impediment from his friends there, in respect of the great vigour wherein the league then was, while the Duke of Guise then lived; and yet, nevertheless, this great preparation passed away like a dream. The invincible navy neither took any one bark of ours, neither yet once offered to land; but after they had been well beaten and chased, made a perambulation about the northern seas; ennobling many coasts with wrecks of mighty ships; and so returned home with greater derision than they set forth with expectation.

So as we shall not need much confederacies and succours, which he saith we want for breaking of the Spanish invasion, no, though the Spaniard should nestle in Britain, and supplant the French, and get some port towns into their hands there, which is yet far off, yet shall he never be so commodiously seated to annoy us, as if he had kept the Low Countries: and we shall rather fear him as a wrangling neighbour, that may trespass now and then upon some straggling ships of ours, than as an invader. And as for our confederacies, God hath given us both means and minds to tender and relieve the states of others; and therefore our confederacies are rather of honour than such as we depend upon. And yet, nevertheless, the Apostatas and Huguenots of France on the one part, for so he termeth the whole nobility in a manner of France, among the which a great part is of his own religion; which maintain the clear and unblemished title of their lawful and natural king against the seditious populace, and the beer-brewers and basket-makers of Holland and Zealand, as he also terms them, on the other, have almost brandied away between them all the Duke of Parma's forces; and I suppose the very mines of the Indies will go low, or ever the one be ruined, or the other recovered. Neither again desire we better confederacies and leagues than Spain itself hath provided for us: "Non enim verbis fœdera confirmantur, sed iisdem utilitatibus." We know to how many states the King of Spain is odious and suspected: and for ourselves we have incensed none by our injuries, nor made any jealous of our ambition: these are in rules of policy the firmest contracts.

Let thus much be said in answer of the second branch, concerning the number of exterior enemies: wherein my meaning is nothing less than to attribute our felicity to our policy; or to nourish ourselves in the humour of security. But I hope we shall depend upon God and be vigilant; and then it will be seen to what end these false alarms will come.

In the third branch of the miseries of England, he taketh upon him to play the prophet, as he hath in all the rest played the poet; and will needs divine or prognosticate the great troubles whereunto this realm shall fall after her majesty's times; as if he that hath so singular a gift in lying of the present time and times past, had nevertheless an extraordinary grace in telling truth of the time to come; or, as if the effect of the pope's curses of England were upon better advice adjourned to those days. It is true, it will be misery enough for this realm, whensoever it shall be, to lose such a sovereign: but, for the rest, we must repose ourselves upon the good pleasure of God. So it is an unjust charge in the libeller to impute an accident of state to the fault of the government.

It pleaseth God sometimes, to the end to make men depend upon him the more, to hide from them the clear sight of future events; and to make them think that full of uncertainties which proveth certain and clear: and sometimes, on the other side, to cross men's expectations, and to make them full of difficulty and perplexity in that which they thought to be easy and assured. Neither is it any new thing for the titles of succession in monarchies to be at times less or more declared. King Sebastian of Portugal, before his journey into Afric, declared no successor. The cardinal, though he were of extreme age, and were much importuned by the King of Spain, and knew directly of six or seven competitors to that crown, yet he rather established I know not what interims, than decided the titles, or designed any certain successor. The dukedom of Ferrara is at this day, after the death of the prince that now liveth, uncertain in the point of succession: the kingdom of Scotland hath declared no successor. Nay, it is very rare in hereditary monarchies, by any act of state, or any recognition or oath of the people in the collateral line, to establish a successor. The Duke of Orleans succeeded Charles VIII. of France, but was never declared successor in his time. Monsieur d'Angulesme also succeeded him, but without any designation. Sons of kings themselves oftentimes, through desire to

reign and to prevent their time, wax dangerous to their parents: how much more cousins in a more remote degree? It is lawful, no doubt, and honourable, if the case require, for princes to make an establishment: but, as it was said, it is rarely practised in the collateral line. Trajan, the best Emperor of Rome, of a heathen, that ever was, at what time the emperors did use to design successors, not so much to avoid the uncertainty of succession, as to the end to have "participes curarum" for the present time, because their empire was so vast; at what time also, adoptions were in use, and himself had been adopted; yet never designed a successor, but by his last will and testament, which also was thought to be suborned by his wife Plotina in the favour of her lover Adrian.

You may be sure that nothing hath been done to prejudice the right; and there can be but one right. But one thing I am persuaded of, that no King of Spain, nor Bishop of Rome, shall umpire or promote any beneficiary, or feodatory king, as they designed to do; even when the Scots queen lived, whom they pretended to cherish. I will not retort the matter of succession upon Spain, but use that modesty and reverence that belongeth to the majesty of so great a king, though an enemy. And so much for this third branch.

The fourth branch he maketh to be touching the overthrow of the nobility, and the oppression of the people: wherein though he may percase abuse the simplicity of any foreigner; yet to an Englishman, or any that heareth of the present condition of England, he will appear to be a man of singular audacity, and worthy to be employed in the defence of any paradox. And, surely, if he would needs have defaced the general state of England, at this time, he should in wisdom rather have made some frierly declamation against the excess of superfluity and delicacy of our times, than to have insisted upon the misery and poverty and depopulation of the land, as may sufficiently appear by that which hath been said.

But, nevertheless, to follow this man in his own steps: first, concerning the nobility; it is true, that there have been in ages past, noblemen, as I take it, both of greater possessions and of greater command and sway than they are at this day. One reason why the possessions are less, I conceive to be, because certain sumptuous veins and humours of expense, as apparel, gaming, maintaining of a kind of followers, and the like, do reign more than they did in times past. Another reason is, because noblemen now-a-days do deal better with their younger sons than they were accustomed to do heretofore, whereby the principal house receiveth many abatements. Touching the command, which is not indeed so great as it hath been, I take it rather to be a commendation of the time, than otherwise: for men were wont factiously to depend upon noblemen, whereof ensued many partialities and divisions, besides much interruption of justice, while the great ones did seek to bear out those that did depend upon them. So as the kings of this realm, finding long since that kind of commandment in noblemen unsafe unto their crown, and inconvenient unto their people, thought meet to restrain the same by provision of laws; whereupon grew the statute of retainers; so as men now depend upon the prince and the laws, and upon no other; a matter which hath also a congruity with the nature of the time, as may be seen in other countries; namely, in Spain, where their grandees are nothing so potent and so absolute as they have been in times past. But otherwise, it may be truly affirmed, that the rights and pre-eminencies of the nobility were never more duly and exactly preserved unto them, than they have been in her majesty's time; the precedence of knights given to the younger sons of barons; no subpœnas awarded against the nobility out of the chancery, but letters; no answer upon oath, but upon honour: besides a number of other privileges in parliament, court, and country. So, likewise, for the countenance of her majesty and the state, in lieutenancies, commissions, offices, and the like, there was never a more honourable and graceful regard had of the nobility; neither was there ever a more faithful remembrancer and exacter of all these particular pre-eminencies unto them; nor a more diligent searcher and register of their pedigrees, alliances, and all memorials of honour, than that man, whom he chargeth to have overthrown the nobility; because a few of them by immoderate expense are decayed, according to the humour of the time, which he hath not been able to resist, no, not in his own house. And as for attainders, there have been in thirty-five years, but five of any of the nobility, whereof but two came to execution; and one of them was accompanied with restitution of blood in the children: yea, all of them, except Westmoreland, were such, as, whether it were by favour of law or government, their heirs have, or are like to have, a great part of their possessions. And so much for the nobility.

Touching the oppression of the people, he mentioneth four points.

1. The consumption of people in the wars.
2. The interruption of traffic.
3. The corruption of justice.
4. The multitude of taxations. Unto all which points there needeth no long speech. For the first, thanks be to God, the benediction of "Crescite" and "Multiplicamini," is not so weak upon this realm of England, but the population thereof may afford such loss of men as were sufficient for the making our late wars, and were in a perpetuity, without being seen either in city or country. We read, that when the Romans did take cense of their people, whereby the citizens were numbered

by the poll in the beginning of a great war; and afterwards again at the ending, there sometimes wanted a third part of the number: but let our master-books be perused, those, I say, that certify the number of all fighting men in every shire, of "vicesimo" of the queen; at what time, except a handful of soldiers in the Low Countries, we expended no men in the wars; and now again, at this present time, and there will appear small diminution. There be many tokens in this realm rather of press and surcharge of people, than of want and depopulation, which were before recited. Besides, it is a better condition of inward peace to be accompanied with some exercise of no dangerous war in foreign parts, than to be utterly without apprentisage of war, whereby people grow effeminate and unpractised when occasion shall be. And it is no small strength unto the realm, that in these wars of exercise and not of peril, so many of our people are trained, and so many of our nobility and gentlemen have been made excellent leaders both by sea and land. As for that he objecteth, we have no provision for soldiers at their return; though that point hath not been altogether neglected, yet I wish with all my heart, that it were more ample than it is; though I have read and heard, that in all estates, upon cashiering and disbanding of soldiers, many have endured necessity.

For the stopping of traffic, as I referred myself to the muster-books for the first, so I refer myself to the custom-books upon this, which will not lie, and do make demonstration of no abatement at all in these last years, but rather of rising and increase. We know of many in London and other places that are within a small time greatly come up and made rich by merchandising: and a man may speak within his compass, and affirm, that our prizes by sea have countervailed any prizes upon us.

And, as to the justice of this realm, it is true, that cunning and wealth have bred many suits and debates in law. But let those points be considered: the integrity and sufficiency of those which supply the judicial places in the queen's courts; the good laws that have been made in her majesty's time against informers and promoters, and for the bettering of trials; the example of severity which is used in the Star Chamber, in oppressing forces and frauds; the diligence and stoutness that is used by justices of assizes, in encountering all countenancing and bearing of causes in the country, by their authorities and wisdom; the great favours that have been used towards copyholders and customary tenants, which were in ancient times merely at the discretion and mercy of the lord, and are now continually relieved from hard dealing, in chancery and other courts of equity: I say, let these and many other points be considered, and men will worthily conceive an honourable opinion of the justice of England.

Now to the points of levies and distributions of money, which he calleth exactions. First, very coldly, he is not abashed to bring in the gathering for Paul's steeple and the lottery trifles; whereof the former, being but a voluntary collection of that men were freely disposed to give, never grew to so great a sum as was sufficient to finish the work for which it was appointed: and so, I imagine, it was converted into some other use; like to that gathering which was for the fortifications of Paris; save that the gathering for Paris came to a much greater, though, as I have heard, no competent sum. And, for the lottery, it was but a novelty devised and followed by some particular persons, and only allowed by the state, being as a gain of hazard: wherein if any gain was, it was because many men thought scorn, after they had fallen from their greater hopes, to fetch their odd money. Then he mentioneth loans and privy seals: wherein he showeth great ignorance and indiscretion, considering the payments back again have been very good and certain, and much for her majesty's honour. Indeed, in other princes' times it was not wont to be so. And, therefore, though the name be not so pleasant, yet the use of them in our times have been with small grievance. He reckoneth also new customs upon cloths, and new impost upon wines. In that of cloths, he is deceived; for the ancient rate of custom upon cloths was not raised by her majesty, but by Queen Mary, a Catholic queen: and hath been commonly continued by her majesty, except he mean the computation of the odd yards, which in strict duty was ever answerable, though the error were but lately looked into, or rather the toleration taken away. And to that of wines, being a foreign merchandise, and but a delicacy, and of those which might be forborne, there hath been some increase of imposition, which can rather make the price of wine higher, than the merchant poorer. Lastly, touching the number of subsidies, it is true, that her majesty, in respect of the great charges of her wars, both by sea and land, against such a lord of treasure as is the King of Spain; having for her part no Indies nor mines, and the revenues of the crown of England being such, as they less grate upon the people than the revenues of any crown or state in Europe, hath, by the assent of parliament, according to the ancient customs of this realm, received divers subsidies of her people, which, as they have been employed upon the defence and preservation of the subject, not upon excessive buildings, nor upon immoderate donatives, nor upon triumphs and pleasures; or any the like veins of dissipation of treasure, which have been familiar to many kings: so have they been yielded with great good-will and cheerfulness, as may appear

by other kinds of benevolence, presented to her likewise in parliament; which her majesty nevertheless hath not put in ure. They have been taxed also and assessed with a very light and gentle hand; and they have been spared as much as may be, as may appear in that her majesty now twice, to spare the subject, hath sold of her own lands. But he that shall look into other countries, and consider the taxes, and talliages, and impositions, and assizes, and the like, that are everywhere in use, will find that the Englishman is the most master of his own valuation, and the least bitten in his purse of any nation of Europe. Nay, even at this instant in the kingdom of Spain, notwithstanding the pioneers do still work in the Indian mines, the Jesuits most play the pioneers, and mine into the Spaniards' purses; and, under the colour of a ghostly exhortation, contrive the greatest exaction that ever was in any realm.

Thus much, in answer of these calumniations, I have thought good to note touching the present state of England; which state is such, that whosoever hath been an architect in the frame thereof, under the blessing of God, and the virtues of our sovereign, needed not to be ashamed of his work.

III. Of the proceedings against the pretended Catholics, whether they have been violent, or moderate and necessary.

I find her majesty's proceedings generally to have been grounded upon two principles: the one,

That consciences are not to be forced, but to be won and reduced by the force of truth, by the aid of time, and the use of all good means of instruction or persuasion: the other,

That causes of conscience, when they exceed their bounds, and prove to be matter of faction, lose their nature; and that sovereign princes ought distinctly to punish the practice or contempt, though coloured with the pretences of conscience and religion.

According to these two principles, her majesty, at her coming to the crown, utterly disliking of the tyranny of the church of Rome, which had used by terror and rigour to seek commandment over men's faiths and consciences; although, as a prince of great wisdom and magnanimity, she suffered but the exercise of one religion, yet her proceedings towards the Papists were with great lenity, expecting the good effects which time might work in them.

And therefore her majesty revived not the laws made in twenty-eighth, and thirty-fifth, of her father's reign, whereby the oath of supremacy might have been offered at the king's pleasure to any subject, though he kept his conscience never so modestly to himself; and the refusal to take the same oath, without farther circumstance, was made treason: but, contrariwise, her majesty not liking to make windows into men's hearts and secret thoughts, except the abundance of them did overflow into overt and express acts and affirmations, tempered her law so, as it restraineth only manifest disobedience in impugning and impeaching advisedly and ambitiously her majesty's supreme power, and maintaining and extolling a foreign jurisdiction. And as for the oath, it was altered by her majesty into a more grateful form; the harshness of the name and appellation of supreme head was removed; and the penalty of the refusal thereof turned into a disablement to take any promotion, or to exercise any charge; and yet that with a liberty of being revested therein, if any man shall accept thereof during his life.

But after many years toleration of a multitude of factious Papists, when Pius Quintus had excommunicated her majesty, and the bill of excommunication was published in London, whereby her majesty was in a sort proscribed, and all her subjects drawn upon pain of damnation from her obedience; and that thereupon, as upon a principal motive or preparative, followed the rebellion in the north; yet, notwithstanding, because many of those evil humours were by that rebellion partly purged, and that she feared at that time no foreign invasion, and much less the attempts of any within the realm, not backed by some foreign succours from without; she contented herself to make a law against that special case of bringing in, or publishing of bulls or the like instruments; whereunto was added a prohibition, not upon pain of treason, but of an inferior degree of punishment, against bringing in of "Agnus Dei's," hallowed beads, and such other merchandise of Rome, as are well known not to be any essential part of the Roman religion, but only to be used in practice as love-tokens, to enchant and bewitch the people's affections from their allegiance to their natural sovereign. In all other points her majesty continued her former lenity.

But when, about the twentieth year of her reign, she had discovered in the King of Spain an intention to invade her dominions, and that a principal point of the plot was to prepare a party within the realm that might adhere to the foreigner; and that the seminaries began to blossom and to send forth daily priests and professed men, who should by vow, taken at shrift, reconcile her subjects from her obedience; yea, and bind many of them to attempt against her majesty's sacred person; and that, by the poison they spread, the humours of most Papists were altered, and that they were no more Papists in custom, but Papists in treasonable faction: then were there new laws made for the punishment of such as should submit themselves to reconcilements or renunciations of obedience. For it is to be understood, that this manner of reconcilement in confession, is of

the same nature and operation that the bull itself was of, with this only difference, that whereas the bull assoiled the subjects from their obedience at once, the other doth it one by one. And therefore it is both more secret, and more insinuative into the conscience, being joined with no less matter than an absolution from mortal sin. And because it was a treason carried in the clouds, and in wonderful secrecy, and came seldom to light; and that there was no presumption thereof so great as the recusants to come to divine service, because it was set down by their decrees, that to come to church before reconcilement, was to live in schism; but to come to church after reconcilement, was absolutely heretical and damnable: therefore there were added new laws, containing a punishment pecuniary against the recusants, not to enforce consciences, but to enfeeble those of whom it rested indifferent and ambiguous, whether they were reconciled or no? For there is no doubt, but if the law of recusancy, which is challenged to be so extreme and rigorous, were thus qualified, that any recusant that shall voluntarily come in and take his oath, that he or she were never reconciled, should immediately be discharged of the penalty and forfeiture of the law; they would be so far from liking well of that mitigation, as they would cry out it was made to entrap them. And when, notwithstanding all this provision, this poison was dispersed so secretly, as that there were no means to stay it, but to restrain the merchants that brought it in; then was there lastly added a law, whereby such seditious priests of the new erection were exiled; and those that were at that time within the land shipped over, and so commanded to keep hence upon pain of treason.

This hath been the proceeding with that sort, though intermingled not only with sundry examples of her majesty's grace, towards such as in her wisdom she knew to be Papists in conscience, and not in faction; but also with an extraordinary mitigation towards the offenders in the highest degree convicted by law, if they would protest, that in case this realm should be invaded with a foreign army, by the pope's authority, for the Catholic cause, as they term it, they would take part with her majesty, and not adhere to her enemies.

And whereas he saith no priest dealt in matter of state, Ballard only excepted; it appeareth by the records of the confession of the said Ballard, and sundry other priests, that all priests at that time generally were made acquainted with the invasion then intended, and afterwards put in act; and had received instructions not only to move an expectation in the people of a change, but also to take their vows and promises in shrift to adhere to the foreigner; insomuch that one of their principal heads vaunted himself in a letter of the device, saying, that it was a point the counsel of England would never dream of, who would imagine that they should practise with some nobleman to make him head of their faction; whereas they took a course only to deal with the people, and them so severally, as any one apprehended should be able to appeal no more than himself, except the priests, who he knew would reveal nothing that was uttered in confession: so innocent was this princely priestly function, which this man taketh to be but a matter of conscience, and thinketh it reason it should have free exercise throughout the land.

IV. Of the disturbance of the quiet of Christendom; and to what causes it may be justly assigned.

It is indeed a question, which those that look into matters of state do well know to fall out very often; though this libeller seemeth to be more ignorant thereof, whether the ambition of the more mighty state, or the jealousy of the less mighty state, is to be charged with breach of amity. Hereof, as there may be many examples, so there is one so proper unto the present matter as though it were many years since, yet it seemeth to be a parable of these times, and, namely, of the proceedings of Spain and England.

The states, then, which answered to these two now, were Macedon and Athens. Consider, therefore, the resemblance between the two Philips, of Macedon and Spain; he of Macedon aspired to the monarchy of Greece, as he of Spain doth of Europe; but more apparently than the first, because that design was discovered in his father Charles V., and so left him by descent; whereas Philip of Macedon was the first of the kings of that nation which fixed so great conceits in his breast. The course which this King of Macedon held was not so much by great armies and invasions, though these wanted not when the case required, but by practice, by sowing of factions in states, and by obliging sundry particular persons of greatness. The state of opposition against his ambitious proceedings was only the state of Athens, as now is the state of England against Spain. For Lacedæmon and Thebes were both low, as France is now; and the rest of the states of Greece were, in power and territories, far inferior. The people of Athens were exceedingly affected to peace, and weary of expense. But the point which I chiefly make the comparison, was that of the orators, which were as counsellors to a popular state; such as were sharpest sighted, and looked deepest into the projects and spreading of the Macedonians, doubting still that the fire, after it licked up the neighbour states, and made itself opportunity to pass, would at last take hold of the dominions of Athens with so great advantages, as they should not be able to remedy it, were ever charged both by the declarations of the King of Macedon, and by the imputation of such Athenians as were corrupted to be of

his faction, as the kindlers of troubles, and disturbers of the peace and leagues: but as that party was in Athens too mighty, so as it discountenanced the true counsels of the orators, and so bred the ruin of that state, and accomplished the ends of that Philip: so it is to be hoped that in a monarchy, where there are commonly better intelligences and resolutions than in a popular state, those plots, as they are detected already, so they will be resisted and made frustrate.

But to follow the libeller in his own course; the sum of that which he delivereth concerning the imputation, as well of the interruption of the amity between the crowns of England and of Spain, as the disturbance of the general peace of Christendom, unto the English proceedings, and not to the ambitious appetites of Spain, may be reduced into three points.

1. Touching the proceeding of Spain and England towards their neighbour states.

2. Touching the proceeding of Spain and England between themselves.

3. Touching the articles and conditions which it pleaseth him, as it were in the behalf of England, to pen and propose for the treating and concluding of a universal peace.

In the first he discovereth how the King of Spain never offered molestation, neither unto the states of Italy, upon which he confineth by Naples and Milan; neither unto the states of Germany, unto whom he confineth by a part of Burgundy and the Low Countries; nor unto Portugal, till it was devolved to him in title, upon which he confineth by Spain; but contrariwise, as one that had in precious regard the peace of Christendom, he designed from the beginning to turn his whole forces upon the Turk. Only he confesseth, that, agreeable to his devotion, which apprehended as well the purging of Christendom from heresies, as the enlarging thereof upon the Infidels, he was ever ready to give succours unto the French kings against the Huguenots, especially being their own subjects: whereas, on the other side, "England," as he affirmeth, "hath not only sowed troubles and dissensions in France and Scotland, the one their neighbour upon the continent, the other divided only by the narrow seas, but also hath actually invaded both kingdoms. For, as for the matters of the Low Countries, they belong to the dealings which have passed by Spain."

In answer whereof, it is worthy the consideration how it pleased God in that king to cross one passion by another; and, namely, that passion which might have proved dangerous unto all Europe which was his ambition, by another which was only hurtful to himself and his own, which was wrath and indignation towards his subjects of the Netherlands. For after that he was settled in his kingdom, and freed from some fear of the Turk, revolving his father's design in aspiring to the monarchy of Europe, casting his eye principally upon the two potent kingdoms of France and England; and remembering how his father had once promised unto himself the conquest of the one; and how himself by marriage had lately had some possession of the other; and seeing that diversity of religion was entered into both these realms; and that France was fallen unto princes weak, and in minority; and England unto the government of a lady, in whom he did not expect that policy of government, magnanimity, and felicity, which since he hath proved, concluded, as the Spaniards are great waiters upon time, and ground their plots deep, upon two points; the one to profess an extraordinary patronage and defence of the Roman religion, making account thereby to have factions in both kingdoms: in England, a faction directly against the state; in France, a faction that did consent indeed in religion with the king, and therefore at first show should seem unproper to make a party for a foreigner. But he foresaw well enough that the King of France should be forced, to the end to retain peace and obedience, to yield in some things to those of the religion, which would undoubtedly alienate the fiery and more violent sort of Papists; which preparation in the people added to the ambition of the family of Guise, which he nourished for an instrument, would in the end make a party for him against the state, as since it proved, and might well have done long before, as may well appear by the mention of league and associations, which is above twenty-five years old in France.

The other point he concluded upon, was, that his Low Countries was the aptest place both for ports and shipping, in respect of England, and for situations in respect of France, having goodly frontier towns upon that realm, and joining also upon Germany, whereby they might receive in at pleasure any forces of Almaigns, to annoy and offend either kingdom. The impediment was the inclination of the people, which, receiving a wonderful commodity of trades out of both realms, especially of England; and having been in ancient league and confederacy with our nation, and having been also homagers unto France, he knew would be in no wise disposed to either war: whereupon he resolved to reduce them to a martial government, like unto that which he had established in Naples and Milan; upon which suppression of their liberties ensued the defection of those provinces. And about the same time the reformed religion found entrance in the same countries; so as the king, inflamed with the resistance he found in the first part of his plots, and also because he might not dispense with his other principle in yielding to any toleration of religion; and withal expecting a shorter work of it than he found, became passionately bent to reconquer those countries; wherein he hath consumed infi

nite treasure and forces. And this is the true cause, if a man will look into it, that hath made the King of Spain so good a neighbour; namely, that he was so entangled with the wars of the Low Countries as he could not intend any other enterprise. Besides, in enterprising upon Italy, he doubted first the displeasure of the see of Rome, with whom he meant to run a course of straight conjunction; also he doubted it might invite the Turk to return. And for Germany, he had a fresh example of his father, who, when he had annexed unto the dominions which he now possesseth, the empire of Almaign, nevertheless sunk in that enterprise; whereby he preceived that the nation was of too strong a composition for him to deal withal: though not long since, by practice, he could have been contented to snatch up in the East the country of Embden. For Portugal, first, the kings thereof were good sons to the see of Rome; next, he had no colour of quarrel or pretence; thirdly, they were officious unto him: yet, if you will believe the Genoese, who otherwise writeth much to the honour and advantage of the kings of Spain, it seemeth he had a good mind to make himself a way into that kingdom, seeing that, for that purpose, as he reporteth, he did artificially nourish the young King Sebastian in the voyage of Afric, expecting that overthrow which followed.

As for his intention to war upon the infidels and Turks, it maketh me think what Francis Guicciardine, a wise writer of history, speaketh of his great-grandfather, making a judgment of him as historiographers use; that he did always mask and veil his appetites with a demonstration of a devout and holy intention to the advancement of the church and the public good. His father, also, when he received advertisement of the taking of the French king, prohibited all ringings, and bonfires, and other tokens of joy; and said, those were to be reserved for victories upon infidels; on whom he meant never to war. Many a cruzado hath the Bishop of Rome granted to him and his predecessors upon that colour, which all have been spent upon the effusion of Christian blood: and now this year the levies of Germans, which should have been made underhand for France, were coloured with the pretence of war upon the Turk: which the princes of Germany descrying, not only break the levies, but threatened the commissioners to hang the next that should offer the like abuse: so that this form of dissembling is familiar, and, as it were, hereditary to the King of Spain.

And as for his succours given to the French king against the Protestants, he could not choose but accompany the pernicious counsels which still he gave to the French kings, of breaking their edicts, and admitting of no pacification, but pursuing their subjects with mortal war, with some offer of aids; which having promised, he could not but in some small degree perform: whereby also the subject of France, namely, the violent Papist, was inured to depend upon Spain. And so much for the King of Spain's proceeding towards other states.

Now for ours: and first touching the point wherein he chargeth us to be the authors of troubles in Scotland and France; it will appear to any that have been well informed of the memoirs of these affairs, that the troubles of those kingdoms were indeed chiefly kindled by one and the same family of the Guise: a family, as was partly touched before, as particularly devoted now for many years together to Spain, as the order of the Jesuits is. This house of Guise, having of late years extraordinarily flourished in the eminent virtue of a few persons, whose ambition, nevertheless, was nothing inferior to their virtue; but being of a house, notwithstanding, which the princes of the blood of France reckoned but as strangers, aspired to a greatness more than civil and proportionable to their cause, wheresoever they had authority; and, accordingly, under consanguinity and religion, they brought into Scotland in the year 1559, and in the absence of the king and queen, French forces in great numbers; whereupon the ancient nobility of that realm, seeing the imminent danger of reducing that kingdom under the tyranny of strangers, did pray, according to the good intelligence between the two crowns, her majesty's neighbourly forces. And so it is true, that the action being very just and honourable, her majesty undertook it, expelled the strangers, and restored the nobility to their degrees, and the state to peace.

After, when certain noblemen of Scotland of the same faction of Guise had, during the minority of the king, possessed themselves of his person, to the end to abuse his authority many ways: and, namely, to make a breach between Scotland and England; her majesty's forces were again, in the year 1582, by the king's best and truest servants sought and required: and with the forces of her majesty prevailed so far, as to be possessed of the castle of Edinburgh, the principal part of that kingdom; which, nevertheless, her majesty incontinently with all honour and sincerity restored, after she had put the king into good and faithful hands; and so, ever since, in all the occasions of intestine troubles, whereunto that nation hath been ever subject, she hath performed unto the king all possible good offices, and such as he doth with all good affection acknowledge.

The same house of Guise, under colour of alliance, during the reign of Francis the Second, and by the support and practice of the queen-mother; who, desiring to retain the regency under her own hands during the minority of Charles the Ninth, used those of Guise as a counterpoise to the princes of the blood, obtained also great authority in the kingdom of France: whereupon, having raised and moved civil wars under pretence of

religion, but, indeed, to enfeeble and depress the ancient nobility of that realm; the contrary part, being compounded of the blood royal, and the greatest officers of the crown, opposed themselves only against their insolency; and to their aids called in her majesty's forces, giving them for security the town of Newhaven: which, nevertheless, when as afterwards, having, by the reputation of her majesty's confederation, made their peace in effect as they would themselves, they would, without observing any conditions that had passed, have had it back again; then, indeed, it was held by force, and so had been long, but for the great mortality which it pleased God to send amongst our men. After which time, so far was her majesty from seeking to sow or kindle new troubles, as continually, by the solicitation of her ambassadors, she still persuaded the kings, both Charles IX. and Henry III., to keep and observe their edicts of pacification, and to preserve their authority by the union of their subjects; which counsel, if it had been as happily followed as it was prudently and sincerely given, France had been at this day a most flourishing kingdom, which is now a theatre of misery: and now, in the end, after that the ambitious practices of the same house of Guise had grown to that ripeness, that, gathering farther strength upon the weakness and misgovernment of the said King Henry III., he was fain to execute the Duke of Guise without ceremony, at Blois. And yet, nevertheless, so many men were embarked and engaged in that conspiracy, as the flame thereof was nothing assuaged; but, contrariwise, that King Henry grew distressed, so as he was enforced to implore the succours of England from her majesty, though no way interested in that quarrel, nor any way obliged for any good offices she had received of that king, yet she accorded to the same: before the arrival of which forces, the king being, by a sacrilegious Jacobine, murdered in his camp, near Paris, yet they went on, and came in good time for the assistance of the king which now reigneth; the justice of whose quarrel, together with the long continued amity and good intelligence which her majesty had with him, hath moved her majesty, from time to time, to supply with great aids; and yet she never, by any demand, urged upon him the putting into her hands of any town or place: so as, upon this that hath been said, let the reader judge, whether hath been the more just and honourable proceeding, and the more free from ambition and passion towards other states; that of Spain, or that of England. Now let us examine the proceedings reciprocal between themselves.

Her majesty, at her coming to the crown, found her realm entangled with the wars of France and Scotland, her nearest neighbours; which wars were grounded only upon the Spaniard's quarrel; but in the pursuit of them had lost England, the town of Calais: which, from the twenty-first of King Edward III., had been possessed by the kings of England. There was a meeting near Bourdeaux, towards the end of Queen Mary's reign, between the commissioners of France, Spain, and England, and some overture of peace was made; but broke off upon the article of the restitution of Calais. After Queen Mary's death, the King of Spain, thinking himself discharged of that difficulty, though in honour he was no less bound to it than before, renewed the like treaty, wherein her majesty concurred: so as the commissioners for the said princes met at Chasteau Cambraissi, near Cambray. In the proceedings of which treaty, it is true, that at the first the commissioners of Spain, for form and in demonstration only, pretended to stand firm upon the demand of Calais: but it was discerned, indeed, that the king's meaning was, after some ceremonies and prefunctory insisting thereupon, to grow apart to a peace with the French, excluding her majesty, and so to leave her to make her own peace, after her people had made his wars. Which covert dealing being politicly looked into, her majesty had reason, being newly invested in her kingdom, and, of her own inclination, being affected to peace, to conclude the same with such conditions as she might: and yet the King of Spain in his dissimulation had so much advantage as she was fain to do it in a treaty apart with the French; whereby, to one that is not informed of the counsels and treaties of state, as they passed, it should seem to be a voluntary agreement of her majesty, whereto the King of Spain would not be party: whereas, indeed, he left her no other choice; and this was the first assay or earnest penny of that king's good affection to her majesty.

About the same time, when the king was solicited to renew such treaties and leagues as had passed between the two crowns of Spain and England, by the Lord Cobham, sent unto him, to acquaint him with the death of Queen Mary; and afterwards by Sir Thomas Chaloner, and Sir Thomas Chamberlain, successively ambassadors resident in his Low Countries; who had order divers times, during their charge, to make overtures thereof, both under the king, and certain principal persons about him; and, lastly, those former motions taking no effect, by Viscount Montacute and Sir Thomas Chamberlain, sent into Spain in the year 1560; no other answer could be had or obtained of the king, but that the treaties did stand in as good force to all intents as new ratifications could make them. An answer strange at that time, but very conformable to his proceedings since: which belike even then were closely smothered in his own breast. For had he not at that time had some hidden alienation of mind, and design of an enemy towards her majesty, so wise a king could not be ignorant, that the renewing and ratifying of treaties between

princes and states, do add great life and force, both of assurance to the parties themselves, and countenance and reputation to the world besides; and have, for that cause, been commonly and necessarily used and practised.

In the message of Viscount Montacute, it was also contained, that he should crave the king's counsel and assistance, according to amity and good intelligence, upon a discovery of certain pernicious plots of the house of Guise, to annoy this realm by the way of Scotland: whereunto the king's answer was so dark and so cold, that nothing could be made of it, till he had made an exposition of it himself by effects, in the express restraint of munition to be carried out of the Low Countries, unto the siege of Leith; because our nation was to have supply thereof from thence. So as in all the negotiations that passed with that king, still her majesty received no satisfaction, but more and more suspicious and bad tokens of evil affection.

Soon after, when upon that project, which was disclosed before the king had resolved to disanul the liberties and privileges unto his subjects of the Netherlands anciently belonging; and to establish amongst them a martial government, which the people, being very wealthy, and inhabiting towns very strong and defensible by fortifications both of nature and the hand, could not endure, there followed the defection and revolt of those countries. In which action, being the greatest of all those which have passed between Spain and England, the proceeding of her majesty hath been so just, and mingled with so many honourable regards, as nothing doth so much clear and acquit her majesty, not only from passion, but also from all dishonourable policy. For, first, at the beginning of the troubles, she did impart unto him faithful and sincere advice of the course that was to be taken for the quieting and appeasing them; and expressly forewarned both himself and such as were in principal charge in those countries, during the wars, of the danger like to ensue, if he held so heavy a hand over that people; lest they should cast themselves into the arms of a stranger. But finding the king's mind so exulcerated as he rejected all counsel that tended to mild and gracious proceeding, her majesty, nevertheless, gave not over her honourable resolution, which was, if it were possible, to reduce and reconcile those countries unto the obedience of their natural sovereign, the King of Spain; and if that might not be, yet to preserve them from alienating themselves to a foreign lord, as, namely, unto the French, with whom they much treated; and amongst whom the enterprise of Flanders was ever propounded as a mean to unite their own civil dissensions, but patiently temporizing, expected the good effect which time might breed. And whensoever the states grew into extremities of despair, and thereby ready to embrace the offer of any foreigner, then would her majesty yield them some relief of money, or permit some supply of forces to go over unto them; to the end, to interrupt such violent resolution: and still continued to meditate unto the king some just and honourable capitulations of grace and accord, such as whereby always should have been preserved unto him such interest and authority as he, in justice, could claim, or a prince moderately minded would seek to have. And this course she held interchangeably, seeking to mitigate the wrath of the king, and the despair of the countries, till such time as after the death of the Duke of Anjou, into whose hands, according to her majesty's prediction, but against her good liking, they had put themselves, the enemy pressing them, the United Provinces were received into her majesty's protection: which was after such time, as the King of Spain had discovered himself, not only an implacable lord to them, but also a professed enemy unto her majesty; having actually invaded Ireland, and designed the invasion of England. For it is to be noted, that the like offers, which were then made unto her majesty, had been made to her long before: but as long as her majesty conceived any hope, either of making their peace, or entertaining her own with Spain, she would never hearken thereunto. And yet now, even at last, her majesty retained a singular and evident proof to the world, of her justice and moderation, in that she refused the inheritance and sovereignty of those goodly provinces; which, by the states, with much instance, was pressed upon her; and being accepted, would have wrought greater contentment and satisfaction, both to her people and theirs, being countries for the site, wealth, commodity of traffic, affection to our nation, obedience of the subjects, well used, most convenient to have been annexed to the crown of England, and with all one charge, danger, and offence of Spain; only took upon her the defence and protection of their liberties; which liberties and privileges are of that nature, as they may justly esteem themselves but conditional subjects to the King of Spain, more justly than Arragon: and may make her majesty as justly esteem the ancient confederacies and treaties with Burgundy to be of force rather with the people and nation, than with the line of the duke; because it was never an absolute monarchy. So as, to sum up her majesty's proceedings in this great action, they have but this, that they have sought first, to restore them to Spain, then to keep them from strangers, and never to purchase them to herself.

But during all that time, the King of Spain kept one tenor in his proceedings towards her majesty, breaking forth more and more into injuries and contempts: her subjects trading into Spain have been many of them burned; some cast into the galleys; others have died in prison, with-

out any other crimes committed, but upon quarrels picked upon them for their religion here at home. Her merchants, at the sack of Antwerp, were divers of them spoiled and put to their ransoms, though they could not be charged with any partaking; neither, upon the complaint of Doctor Wilson and Sir Edward Horsey, could any redress be had. A general arrest was made by the Duke of Alva of Englishmen's both goods and persons, upon pretence that certain ships, stayed in this realm, laden with goods and money of certain merchants of Genoa, belonged to that king: which money and goods was afterwards, to the uttermost value, restored and paid back; whereas our men were far from receiving the like justice on their side. Dr. Man, her majesty's ambassador, received, during his legation, sundry indignities; himself being removed out of Madrid, and lodged in a village, as they are accustomed to use the ambassadors of Moors: his son and steward forced to assist at a mass with tapers in their hands; besides sundry other contumelies and reproaches. But the spoiling or damnifying of a merchant, vexation of a common subject, dishonour of an ambassador, were rather but demonstrations of ill disposition, than effects, if they be compared with actions of state, wherein he and his ministers have sought the overthrow of this government. As in the year 1569, when the rebellion in the north part of England brake forth; who but the Duke of Alva, then the king's lieutenant in the Low Countries, and Don Guerres of Espes, then his ambassador lieger here, were discovered to be chief instruments and practisers; having complotted with the Duke of Norfolk at the same time, as was proved at the same duke's condemnation, that an army of twenty thousand men should have landed at Harwich, in aid of that part, which the said duke had made within the realm, and the said duke having spent and employed one hundred and fifty thousand crowns in that preparation.

Not contented thus to have consorted and assisted her majesty's rebels in England, he procured a rebellion in Ireland; arming and sending thither in the year 1579 an arch-rebel of that country, James Fitz-Morrice, which before was fled. And, truly to speak, the whole course of molestation, which her majesty hath received in that realm by the rising and keeping on of the Irish, hath been nourished and fomented from Spain; but afterwards most apparently, in the year 1580, he invaded the same Ireland with Spanish forces, under an Italian colonel, by name San Josepho, being but the forerunners of a greater power: which by treaty between him and the pope should have followed, but that, by the speedy defeat of those former, they were discouraged to pursue the action: which invasion was proved to be done by the king's own orders, both by the letters of Secretary Escovedo and of Guerres to the king; and also by divers other letters, wherein the particular conferences were set down concerning this enterprise between Cardinal Riario, the pope's legate, and the king's deputy in Spain, touching the general, the number of men, the contribution of money, and the manner of the prosecuting of the action, and by the confession of some of the chiefest of those that were taken prisoners at the fort: which act being an act of apparent hostility, added unto all the injuries aforesaid, and accompanied with a continual receipt, comfort, and countenance, by audiences, pensions, and employments, which he gave to traitors and fugitives, both English and Irish; as Westmoreland, Paget, Englefield, Baltinglass, and numbers of others; did sufficiently justify and warrant that pursuit of revenge, which, either in the spoil of Carthagena and San Domingo in the Indies, by Mr. Drake, or in the undertaking the protection of the Low Countries, when the Earl of Leicester was sent over, afterwards followed. For before that time her majesty, though she stood upon her guard in respect of the just cause of jealousy, which the sundry injuries of that king gave her; yet had entered into no offensive action against him. For both the voluntary forces which Don Antonio had collected in this realm, were by express commandment restrained, and offer was made of restitution to the Spanish ambassador of such treasure as had been brought into this realm, upon proof that it had been taken by wrong; and the Duke of Anjou was, as much as could stand with the near treaty of a marriage which then was very forward between her majesty and the said duke, diverted from the enterprise of Flanders.

But to conclude this point: when that, some years after, the invasion and conquest of this land, intended long before, but through many crosses and impediments, which the King of Spain found in his plots, deferred, was in the year 1588 attempted; her majesty, not forgetting her own nature, was content at the same instant to treat of a peace; not ignorantly, as a prince that knew not in what forwardness his preparations were, for she had discovered them long before, nor fearfully, as may appear by the articles whereupon her majesty in that treaty stood, which were not the demands of a prince afraid; but only to spare the shedding of Christian blood, and to show her constant desire to make her reign renowned, rather by peace than victories: which peace was on her part treated sincerely, but on his part, as it should seem, was but an abuse; thinking thereby to have taken us more unprovided: so that the Duke of Parma, not liking to be used as an instrument in such a case, in regard of his particular honour, would sometimes in treating interlace, that the king his master meant to make his peace with his sword in his hand. Let it then be tried, upon an indifferent view of the proceedings of England and Spain, who it is that fisheth in troubled waters, and hath disturbed the peace of

Christendom, and hath written and described all his plots in blood.

There follow the articles of a universal peace, which the libeller, as a commissioner for the estate of England, hath propounded, and are these:

First, that the King of Spain should recall such forces, as, of great compassion to the natural people of France, he hath sent thither to defend them against a relapsed Huguenot.

Secondly, that he suffer his rebels of Holland and Zealand quietly to possess the places they hold, and to take unto them all the rest of the Low Countries also; conditionally, that the English may still keep the possession of such port towns as they have, and have some half a dozen more annexed unto them.

Thirdly, that the English rovers might peaceably go to his Indies, and there take away his treasure and his Indies also.

And these articles being accorded, he saith, might follow that peace which passeth all understanding, as he calleth it in a scurrile and profane mockery of the peace which Christians enjoy with God, by the atonement which is made by the blood of Christ, whereof the apostle saith that it passeth all understanding. But these his articles are sure mistaken, and indeed corrected are briefly these:

1. That the King of France be not impeached in reducing his rebels to obedience.

2. That the Netherlands be suffered to enjoy their ancient liberties and privileges, and so forces of strangers to be withdrawn, both English and Spanish.

3. That all nations may trade into the East and West Indies; yea, discover and occupy such parts as the Spaniard doth not actually possess, and are not under civil government, notwithstanding any donation of the pope.

V. Of the cunning of the libeller, in palliation of his malicious invectives against her majesty and the state, with pretence of taxing only the actions of the Lord Burleigh.

I cannot rightly call this point cunning in the libeller, but rather good will to be cunning, without skill indeed of judgment: for finding that it hath been the usual and ready practice of seditious subjects to plant and bend their invectives and clamours, not against the sovereigns themselves, but against some such as had grace with them and authority under them, he put in ure his learning in a wrong and unproper case. For this hath some appearance to cover undutiful invectives, when it is used against favourites or new upstarts, and sudden-risen counsellors; but when it shall be practised against one that hath been counsellor before her majesty's time, and hath continued longer counsellor than any other counsellor in Europe; one that must needs have been great if it were but by surviving alone, though he had no other excellency; one that hath passed the degrees of honour with great travel and long time, which quencheth always envy, except it be joined with extreme malice; then it appeareth manifestly to be but a brick wall at tennis, to make the defamation and hatred rebound from the counsellor upon the prince. And assuredly they be very simple to think to abuse the world with those shifts; since every child can tell the fable, that the wolf's malice was not to the shepherd, but to his dog. It is true, that these men have altered their tune twice or thrice: when the match was in treating with the Duke of Anjou, they spake honey as to her majesty; all the gall was uttered against the Earl of Leicester: but when they had gotten heart upon expectation of the invasion, they changed style, and disclosed all the venom in the world immediately against her majesty: what new hope hath made them return to their Sinon's note, in teaching Troy how to save itself, I cannot tell. But in the mean time they do his lordship much honour: for the more despitefully they inveigh against his lordship, the more reason hath her majesty to trust him, and the realm to honour him. It was wont to be a token of scarce a good liegeman when the enemy spoiled the country, and left any particular men's houses or fields unwasted.

VI. Certain true general notes upon the actions of the Lord Burleigh.

But above all the rest, it is a strange fancy in the libeller that he maketh his lordship to be the "primum mobile" in every action without distinction; that to him her majesty is accountant of her resolutions; that to him the Earl of Leicester and Mr. Secretary Walsingham, both men of great power, and of great wit and understanding, were but as instruments: whereas it is well known, that as to her majesty, there was never a counsellor of his lordship's long continuance that was so appliable to her majesty's princely resolutions; endeavouring always, after faithful propositions and remonstrances, and these in the best words, and the most grateful manner, to rest upon such conclusions, as her majesty in her own wisdom determineth, and them to execute to the best: so far hath he been from contestation, or drawing her majesty into any his own courses. And as for the forenamed counsellors and others, with whom his lordship had consorted in her majesty's service, it is rather true that his lordship, out of the greatness of his experience and wisdom, and out of the coldness of his nature, hath qualified generally all hard and extreme courses, as far as the service of her majesty, and the safety of the state, and the making himself compatible with those with whom he served, would permit: so far hath his lordship been from inciting others, or running a full course with them in that kind. But yet it is more strange

that this man should be so absurdly malicious, as he should charge his lordship, not only with all actions of state, but also with all the faults and vices of the times; as, if curiosity and emulation have bred some controversies in the church; though, thanks be to God, they extend but to outward things; as, if wealth, and the cunning of wits have brought forth multitudes of suits in law; as, if excess in pleasures, and in magnificence, joined with the unfaithfulness of servants, and the greediness of moneyed men, have decayed the patrimony of many noblemen, and others; that all these, and such like conditions of the time, should be put on his lordship's account; who hath been, as far as to his place appertaineth, a most religious and wise moderator in church matters to have unity kept; who with great justice hath despatched infinite causes in law that have orderly been brought before him: and for his own example, may say that which few men can say; but was sometimes said by Cephalus, the Athenian so much renowned in Plato's works; who having lived near to the age of a hundred years, and in continual affairs and business, was wont to say of himself; "That he never sued any, neither had been sued by any:" who by reason of his office hath preserved many great houses from overthrow, by relieving sundry extremities towards such as in their minority have been circumvented; and towards all such as his lordship might advise, did ever persuade sober and limited expense. Nay, to make proof farther of his contented manner of life, free from suits and covetousness; as he never sued any man, so did he never raise any rent, or put out any tenant of his own: nor ever gave consent to have the like done to any of the queen's tenants; matters singularly to be noted in this age.

But, however, by this fellow, as in a false artificial glass, which is able to make the best face deformed, his lordship's doings being set forth; yet let his proceedings, which be indeed his own, be indifferently weighed and considered; and let men call to mind, that his lordship was never a violent and transported man in matters of state, but ever respective and moderate; that he was never man in his particular a breaker of necks; no heavy enemy, but ever placable and mild; that he was never a brewer of holy water in court; no dallier, no abuser, but ever real and certain; that he was never a bearing man, nor carrier of causes, but ever gave way to justice and course of law; that he was never a glorious wilful proud man, but ever civil and familiar, and good to deal withal; that in the course of his service, he hath rather sustained the burden, than sought the fruition of honour or profit; scarcely sparing any time from his cares and travels to the sustentation of his health; that he never had, nor sought to have for himself and his children, any pennyworth of lands or goods that appertained to any attainted of any treason, felony, or otherwise that he never had, or sought any kind of benefit by any forfeiture to her majesty; that he was never a factious commender of men, as he that intended any ways to besiege her, by bringing in men at his devotion; but was ever a true reporter unto her majesty of every man's deserts and abilities; that he never took the course to unquiet or offend, no, nor exasperate her majesty, but to content her mind, and mitigate her displeasure; that he ever bare himself reverently and without scandal in matters of religion, and without blemish in his private course of life. Let men, I say, without passionate malice, call to mind these things, and they will think it reason, that though he be not canonized for a saint in Rome, yet he is worthily celebrated as "pater patriæ" in England, and though he be libelled against by fugitives, yet he is prayed for by a multitude of good subjects; and, lastly, though he be envied whilst he liveth, yet he shall be deeply wanted when he is gone. And assuredly many princes have had many servants of trust, name, and sufficiency: but where there have been great parts, there hath often wanted temper of affection; where there have been both ability and moderation, there have wanted diligence and love of travail; where all three have been, there have sometimes wanted faith and sincerity; where some few have had all these four, yet they have wanted time and experience; but where there is a concurrence of all these, there is no marvel, though a prince of judgment be constant in the employment and trust of such a servant.

VII. Of divers particular untruths and abuses dispersed through the libel.

The order which this man keepeth in his libel, is such, as it may appear, that he meant but to empty some note-book of the matters of England, to bring in, whatsoever came of it, a number of idle jests, which he thought might fly abroad; and intended nothing less than to clear the matters he handled by the light of order and distinct writing. Having, therefore, in the principal points, namely, the second, third, and fourth articles, ranged his scattering and wandering discourse into some order, such as may help the judgment of the reader, I am now content to gather up some of his by-matters and straggling untruths, and very briefly to censure them.

Page 9, he saith, That his lordship could neither, by the greatness of his beads, creeping to the cross, nor exterior show of devotion before the high altar, find his entrance into high dignity in Queen Mary's time. All which is a mere fiction at pleasure; for Queen Mary bare that respect unto him, in regard of his constant standing for her title, as she desired to continue his service; the refusal thereof growing from his own part: he enjoyed nevertheless all other liberties and

favours of the time; save only that it was put into the queen's head that it was dangerous to permit him to go beyond the sea, because he had a great wit of action, and had served in so principal a place; which nevertheless after, with Cardinal Pool, he was suffered to do.

Page "eadem" he saith, Sir Nicholas Bacon, that was lord keeper, was a man of exceedingly crafty wit; which showeth that this fellow in his slanders is no good marksman, but throweth out his words of defaming without all level. For all the world noted Sir Nicholas Bacon to be a man plain, direct, and constant, without all finesse and doubleness; and one that was of the mind that a man in his private proceedings and estate, and in the proceedings of state, should rest upon the soundness and strength of his own courses, and not upon practice to circumvent others; according to the sentence of Solomon, "Vir prudens advertit ad gressus suos, stultus autem divertit ad dolos:" insomuch that the Bishop of Ross, a subtle and observing man, said of him, that he could fasten no words upon him, and that it was impossible to come within him, because he offered no play: and the queen-mother of France, a very politic princess, said of him, that he should have been of the council of Spain, because he despised the occurrents, and rested upon the first plot: so that if he were crafty, it is hard to say who is wise.

Page 10, he saith, That the Lord Burleigh, in the establishment of religion, in the beginning of the queen's time, prescribed a composition of his own invention; whereas the same form, not fully six years before, had been received in this realm in King Edward's time: so as his lordship being a Christian politic counsellor, thought it better to follow a precedent, than to innovate; and chose the precedent rather at home than abroad.

Page 41, he saith, That Catholics never attempted to murder any principal person of her majesty's court, as did Burchew, whom he calleth a puritan, in wounding of a gentleman instead of Sir Christopher Hatton; but by their great virtue, modesty, and patience, do manifest in themselves a far different spirit from the other sort. For Burchew, it is certain he was mad; as appeareth not only by his mad mistaking, but by the violence that he offered afterwards to his keeper, and most evidently by his behaviour at his execution: but of Catholics, I mean the traitorous sort of them, a man may say as Cato said sometimes of Cæsar, "eum ad evertendam rempublicam sobrium accessisse:" they came sober and well advised to their treasons and conspiracies; and commonly they look not so low as the counsellors, but have bent their murderous attempts immediately against her majesty's sacred person, which God have in his precious custody! as may appear by the conspiracy of Sommerville, Parry, Savage, the six, and others; nay, they have defended it "in thesi," to be a lawful act.

Page 43, he saith, That his lordship, whom he calleth the arch-politic, hath fraudulently provided, that when any priest is arraigned, the indictment is enforced with many odious matters: wherein he showeth great ignorance, if it be not malice; for the law permitteth not the ancient forms of indictments to be altered; like as, in an action of trespass, although a man take away another's goods in the peaceablest manner in the world, yet the writ hath "quare vi et armis;" and if a man enter upon another's ground, and do no more, the plaintiff mentioneth "quod herbam suam, ibidem crescentem, cum equis, bobus, porcis, et bidentibus, depastus sit, conculcavit et consumpsit." Neither is this any absurdity, for in the practice of all law, the formularies have been few and certain; and not varied according to every particular case. And in indictments also of treason, it is not so far fetched as in that of trespass; for the law ever presumeth in treason, an intention of subverting the state, and impeaching the majesty royal.

Page 45, and in other places, speaking of the persecuting of the Catholics, he still mentioneth bowellings and consuming men's entrails by fire; as if this were a torture newly devised: wherein he doth cautelously and maliciously suppress, that the law and custom of this land from all antiquity hath ordained, that punishment in case of treason, and permitteth no other. And a punishment surely it is, though of great terror, yet by reason of the quick despatching, of less torment far than either the wheel or forcipation, yea, than simple burning.

Page 48, he saith, England is confederate with the great Turk: wherein, if he mean it because the merchants have an agent in Constantinople, how will he answer for all the kings of France, since Francis the First, which were good Catholics? For the emperor? For the King of Spain himself? For the senate of Venice, and other states, that have had long time ambassadors liegers in that court? If he mean it because the Turk hath done some special honour to our ambassador, if he be so to be termed, we are beholden to the King of Spain for that: for that the honour, we have won upon him by opposition, hath given us reputation through the world: if he mean it because the Turk seemeth to affect us for the abolishing of images; let him consider then what a scandal the matter of images hath been in the church, as having been one of the principal branches whereby Mahometism entered.

Page 65, he saith, Cardinal Allen was of late very near to have been elected pope. Whereby he would put the Catholics here in some hope, that once within five or six years, for a pope commonly sitteth no longer, he may obtain that which he missed narrowly. This is a direct abuse, for it is certain in all the conclaves since Sixtus Quintus, who gave him his hat, he was

never in possibility; nay, the King of Spain, that hath patronised the church of Rome so long, as he is become a right patron of it, in that he seeketh to present to that see whom he liketh, yet never durst strain his credit to so desperate a point as once to make a canvass for him: no, he never nominated him in his inclusive narration. And those that know any thing of the respects of conclaves, know that he is not papable: first, because he is an ultramontane, of which sort there hath been none these fifty years. Next, because he is a cardinal of alms of Spain, and wholly at the devotion of that king. Thirdly, because he is like to employ the treasure and favours of the popedom upon the enterprizes of England, and the relief and advancement of English fugitives, his necessitous countrymen. So as he presumed much upon the simplicity of the reader in this point, as in many more.

Page 55, and again p. 70, he saith, His lordship, meaning the Lord Burleigh, intendeth to match his grandchild, Mr. William Cecil, with the Lady Arabella. Which being a mere imagination, without any circumstance at all to induce it, more than that they are both unmarried, and that their years agree well, needeth no answer. It is true that his lordship, being no stoical unnatural man, but loving towards his children, for "charitas reipublicæ incipit a familia," hath been glad to match them into honourable and good blood: and yet not so, but that a private gentleman of Northamptonshire, that lived altogether in the country, was able to bestow his daughters higher than his lordship hath done. But yet it is not seen by any thing past, that his lordship ever thought, or affected to match his children in the blood royal. His lordship's wisdom, which hath been so long of gathering, teacheth him to leave to his posterity, rather surety than danger. And I marvel where be the combinations which have been with great men; and the popular and plausible courses, which ever accompany such designs as the libeller speaketh of: and therefore this match is but like unto that which the same fellow concluded between the same Lady Arabella and the Earl of Leicester's son, when he was but a twelvemonth old.

Page 70, he saith, He laboureth incessantly with the queen, to make his eldest son deputy of Ireland; as if that were such a catch, considering all the deputies since her majesty's time, except the Earl of Sussex and the Lord Grey, have been persons of meaner degree than Sir Thomas Cecil is; and the most that is gotten by that place, is but the saving and putting up of a man's own revenues, during those years that he serveth there; and this, perhaps, to be saved with some displeasure, at his return.

Page "eadem" he saith, He hath brought in his second son, Sir Robert Cecil, to be of the council, who hath neither wit nor experience; which speech is as notorious an untruth, as is in all the libel: for it is confessed by all men that know the gentleman, that he hath one of the rarest and most excellent wits of England, with a singular delivery and application of the same; whether it be to use a continued speech, or to negotiate, or to couch in writing, or to make report, or discreetly to consider of the circumstances, and aptly to draw things to a point; and all this joined with a very good nature and a great respect to all men, as is daily more and more revealed. And for his experience, it is easy to think that his training and helps hath made it already such, as many, that have served long prentishood for it, have not attained the like: so as if that be true, "qui beneficium digno dat, omnes obligat," not his father only but the state is bound unto her majesty, for the choice and employment of so sufficient and worthy a gentleman.

There be many other follies and absurdities in the book; which, if an eloquent scholar had it in hand, he would take advantage thereof, and justly make the author not only odious, but ridiculous and contemptible to the world: but I pass them over, and even this which hath been said hath been vouchsafed to the value and worth of the matter, and not the worth of the writer, who hath handled a theme above his compass.

VIII. Of the height of impudency that these men are grown unto in publishing and avouching untruths, with a particular recital of some of them for an assay.

These men are grown to a singular spirit and faculty in lying and abusing the world: such as, it seemeth, although they are to purchase a particular dispensation for all other sins, yet they have a dispensation dormant to lie for the Catholic cause; which moveth me to give the reader a taste of their untruths, such as are written, and are not merely gross and palpable; desiring him out of their own writings, when any shall fall into his hands, to increase the roll at least in his own memory.

We retain in our calendars no other holydays but such as have their memorials in the Scriptures; and therefore in the honour of the blessed Virgin, we only receive the feast of the annunciation and the purification; omitting the other of the conception and the nativity; which nativity was used to be celebrated upon the eighth of September, the vigil whereof happened to be the nativity of our queen: which though we keep not holy, yet we use therein certain civil customs of joy and gratulation, as ringing of bells, bonfires, and such like: and likewise make a memorial of the same day in our calendar: whereupon they have published, that we have expunged the nativity of the blessed Virgin, and put instead there-

of the nativity of our queen: and, farther, that we sing certain hymns unto her, used to be sung unto our Lady.

It happened that, upon some bloodshed in the church of Paul's, according to the canon law, yet with us in force, the said church was interdicted, and so the gates shut up for some few days; whereupon they published, that, because the same church is a place where people use to meet to walk and confer, the queen's majesty, after the manner of the ancient tyrants, had forbidden all assemblies and meetings of people together, and for that reason, upon extreme jealousy, did cause Paul's gates to be shut up.

The gate of London called Ludgate, being in decay, was pulled down, and built anew; and on the one side was set up the image of King Lud and his two sons; who, according to the name, was thought to be the first founder of that gate; and on the other side, the image of her majesty, in whose time it was re-edified; whereupon they published that her majesty, after all the images of the saints were long beaten down, had now at last set up her own image upon the principal gate of London, to be adored; and that all men were forced to do reverence to it as they passed by, and a watch there placed for that purpose.

Mr. Jewel, the Bishop of Salisbury, who according to his life died most godly and patiently, at the point of death used the versicle of the hymn, "Te Deum, O Lord, in thee have I trusted, let me never be confounded;" whereupon, suppressing the rest, they published, that the principal champion of the heretics in his very last words cried he was confounded.

In the act of recognition of "primo," whereby the right of the crown is acknowledged by parliament to be in her majesty, the like whereof was used in Queen Mary's time, the words of limitation are, "in the queen's majesty, and the natural heirs of her body, and her lawful successors." Upon which word, natural, they do maliciously, and indeed villanously gloss, that it was the intention of the parliament, in a cloud to convey the crown to any issue of her majesty's that were illegitimate; whereas the word heir doth with us so necessarily and pregnantly import lawfulness, as it had been indecorum, and uncivil speaking of the issues of a prince, to have expressed it.

They set forth in the year a book with tables and pictures of the persecutions against Catholics, wherein they have not only stories of fifty years old to supply their pages, but also taken all the persecutions of the primitive church, under the heathen, and translated them to the practice of England; as that of worrying priests under the skins of bears, by dogs, and the like.

I conclude, then, that I know not what to make of this excess in avouching untruths, save this, that they may truly chant in their quires; "Linguam nostram magnificabimus, labia nostra nobis sunt:" and that they who have long ago forsaken the truth of God, which is the touchstone, must now hold by the whetstone; and that their ancient pillar of lying wonders being decayed, they must now hold by lying slanders, and make their libels successors to their legend.

SPEECHES.

A SPEECH

MADE BY

SIR FRANCIS BACON, KNIGHT,

CHOSEN BY THE COMMONS TO PRESENT

A PETITION TOUCHING PURVEYORS.

DELIVERED TO HIS MAJESTY IN THE WITHDRAWING-CHAMBER AT WHITEHALL,

IN THE PARLIAMENT HELD PRIMO ET SECUNDO JACOBI, THE FIRST SESSION.

It is well known to your majesty, excellent king, that the Emperors of Rome, for their better glory and ornament, did use in their titles the additions of the countries and nations where they had obtained victories; as "Germanicus, Britannicus," and the like. But after all those names, as in the higher place, followed the name of "pater patriæ," as the greatest name of all human honour, immediately preceding that name of Augustus; whereby they took themselves to express some affinity that they had, in respect of their office, with divine honour. Your majesty might, with good reason, assume to yourself many of those other names; as "Germanicus, Saxonicus, Britannicus, Francicus, Danicus, Gothicus," and others, as appertaining to you not by bloodshed, as they bare them, but by blood; your majesty's royal person being a noble confluence of streams and veins, wherein the royal blood of many kingdoms of Europe are met and united. But no name is more worthy of you, nor may more truly be ascribed unto you, than that name of father of your people, which you bear and express not in the formality of your style, but in the real course of your government. We ought not to say unto you, as was said to Julius Cæsar, "Quæ miremur, habemus; quæ laudemus, expectamus:" that we have already wherefore to admire you, and that now we expect somewhat for which to commend you; for we may, without suspicion of flattery, acknowledge, that we have found in your majesty great cause both of admiration and commendation. For great is the admiration, wherewith you have possessed us since this parliament began, in those two causes wherein we have had access unto you, and heard your voice; that of the return of Sir Francis Goodwin, and that of the union; whereby, it seemeth unto us, the one of these being so subtle a question of law; and the other so high a cause of estate, that, as the Scripture saith of the wisest king, "that his heart was as the sands of the sea;" which, though it be one of the largest and vastest bodies, yet it consisteth of the smallest motes and portions; so, I say, it appeareth unto us in these two examples, that God hath given your majesty a rare sufficiency, both to compass and fathom the greatest matters, and to discern the least. And for matter of praise and commendation, which chiefly belongeth to goodness, we cannot but with great thankfulness profess, that your majesty, within the circle of one year of your reign, "infra orbem anni vertentis," hath endeavoured to unite your church, which was divided; to supply your nobility, which was diminished; and to ease your people in cases where they were burdened and oppressed.

In the last of these your high merits, that is, the ease and comfort of your people, doth fall out to be comprehended the message which I now bring unto your majesty, concerning the great grievance arising by the manifold abuses of purveyors, differing in some degree from most of the things wherein we deal and consult; for it is true, that the knights, citizens, and burgesses, in parliament assembled, are a representative body of your Commons and third estate; and in many matters, although we apply ourselves to perform the trust of those that chose us, yet it may be, we do speak much out of our own senses and discourses. But in this grievance, being of that nature whereunto the poor people is most exposed, and men of quality less, we shall most humbly desire your

majesty to conceive, that your majesty doth not hear our opinions or senses, but the very groans and complaints themselves of your Commons, more truly and vively, than by representation. For there is no grievance in your kingdom so general, so continual, so sensible, and so bitter unto the common subject, as this whereof we now speak; wherein it may please your majesty to vouchsafe me leave, first, to set forth unto you the dutiful and respective carriage of our proceeding; next, the substance of our petition; and, thirdly, some reasons and motives which in all humbleness we do offer to your majesty's royal consideration or commiseration; we assuring ourselves that never king reigned that had better notions of head, and motions of heart, for the good and comfort of his loving subjects.

For the first: in the course of remedy which we desire, we pretend not, nor intend not, in any sort, to derogate from your majesty's prerogative, nor to touch, diminish, or question any of your majesty's regalities or rights. For we seek nothing but the reformation of abuses, and the execution of former laws whereunto we are born. And although it be no strange thing in parliament for new abuses to crave new remedies, yet, nevertheless, in these abuses, which, if not in nature, yet in extremity and height of them, are most of them new, we content ourselves with the old laws; only we desire a confirmation and quickening of them in their execution; so far are we from any humour of innovation or encroachment.

As to the court of the green-cloth, ordained for the provision of your majesty's most honourable household, we hold it ancient, we hold it reverend. Other courts respect your politic person, but that respects your natural person. But yet, notwithstanding, most excellent king, to use that freedom which to subjects that pour out their griefs before so gracious a king, is allowable, we may very well allege unto your majesty a comparison or similitude used by one of the fathers* in another matter, and not unfitly representing our case in this point: and it is of the leaves and roots of nettles; the leaves are venomous and stinging where they touch; the root is not so, but is without venom or malignity; and yet it is that root that bears and supports all the leaves. This needs no farther application.

To come now to the substance of our petition. It is no other, than by the benefit of your majesty's laws to be relieved of the abuses of purveyors; which abuses do naturally divide themselves into three sorts; the first, they take in kind that they ought not to take; the second, they take in quantity a far greater proportion than cometh to your majesty's use; the third, they take in an unlawful manner; in a manner, I say, directly and expressly prohibited by divers laws.

For the first of these, I am a little to alter their name; for instead of takers, they become taxers; instead of taking provision for your majesty's service, they tax your people "ad redimendam vexationem:" imposing upon them, and extorting from them, divers sums of money, sometimes in gross, sometimes in the nature of stipends annually paid, "ne noceant," to be freed and eased of their oppression. Again, they take trees, which by law they cannot do; timber trees, which are the beauty, countenance, and shelter of men's houses; that men have long spared from their own purse and profit; that men esteem, for their use and delight, above ten times the value; that are a loss which men cannot repair or recover. These do they take, to the defacing and spoiling of your subjects' mansions and dwellings, except they may be compounded with to their own appetites. And if a gentleman be too hard for them while he is at home, they will watch their time when there is but a bailiff or a servant remaining, and put the axe to the root of the tree, ere ever the master can stop it. Again, they use a strange and most unjust exaction, in causing the subjects to pay poundage of their own debts, due from your majesty unto them; so as a poor man, when he hath had his hay, or his wood, or his poultry, which perchance he was full loath to part with, and had for the provision of his own family, and not to put to sale, taken from him, and that not at a just price, but under the value, and cometh to receive his money, he shall have after the rate of twelve pence in the pound abated for poundage of his due payment, upon so hard conditions. Nay, farther, they are grown to that extremity, as is affirmed, though it be scarce credible, save that in such persons all things are credible, that they will take double poundage, once when the debenture is made, and again the second time when the money is paid.

For the second point, most gracious sovereign, touching the quantity which they take, far above that which is answered to your majesty's use: they are the only multipliers in the world; they have the art of multiplication. For it is affirmed unto me by divers gentlemen of good report, and experience in these causes, as a matter which I may safely avouch before your majesty, to whom we owe all truth, as well of information as subjection, that there is no pound profit which redoundeth to your majesty in this course, but induceth and begetteth three pound damage upon your subjects, besides the discontentment. And to the end they may make their spoil more securely, what do they? Whereas divers statutes do strictly provide, that whatsoever they take, shall be registered and attested, to the end that, by making a collation of that which is taken from the country, and that which is answered above, their deceits might appear; they, to the end to obscure their deceits, utterly omit the observation of this, which the law prescribeth.

* St. Augustine.

And therefore to descend, if it may please your majesty, to the third sort of abuse, which is of the unlawful manner of their taking, whereof this omission is a branch; and it is so manifold, as it rather asketh an enumeration of some of the particulars, than a prosecution of all. For their price: by law they ought to take as they can agree with the subject; by abuse they take an imposed and enforced price: by law they ought to make but one appraisement by neighbours in the country; by abuse they make a second appraisement at the court-gate; and when the subject's cattle come up many miles lean, and out of plight, by reason of their great travel, then they prize them anew at an abated price: by law they ought to take between sun and sun; by abuse they take by twilight, and in the night-time, a time well chosen for malefactors: by law they ought not to take in the highways, a place by your majesty's high prerogative protected, and by statute by special words excepted; by abuse they take in the ways, in contempt of your majesty's prerogative and laws: by law they ought to show their commission, and the form of commission is by law set down; the commissions they bring down, are against the law, and because they know so much, they will not show them. A number of other particulars there are, whereof as I have given your majesty a taste, so the chief of them upon deliberate advice are set down in writing by the labour of some committees, and approbation of the whole House, more particularly and lively than I can express them, myself having them at the second hand by reason of my abode above. But this writing is a collection of theirs who dwell amongst the abuses of these offenders, and the complaints of the people; and therefore must needs have a more perfect understanding of all the circumstances of them.

It remaineth only that I use a few words, the rather to move your majesty in this cause: a few words, I say, a very few; for neither need so great enormities any aggravating, neither needeth so great grace, as useth of itself to flow from your majesty's princely goodness, any artificial persuading. There be two things only which I think good to set before your majesty; the one the example of your most noble progenitors, kings of this realm, who, from the first king that endowed this kingdom with the great charters of their liberties, until the last, all save one, who, as he was singular in many excellent things, so I would he had not been alone in this, have ordained, every one of them in their several reigns, some laws or law against this kind of offenders; and especially the example of one of them, that king who, for his greatness, wisdom, glory, and union of several kingdoms, resembleth your majesty most, both in virtue and fortune, King Edward III., who, in his time only, made ten several laws against this mischief. The second is the example of God himself; who hath said and pronounced, "That he will not hold him guiltless that taketh his name in vain." For all these great misdemeanors are committed in and under your majesty's name: and therefore we hope your majesty will hold them twice guilty that commit these offences; once for the oppressing of the people, and once more for doing it under the colour and abuse of your majesty's most dreaded and beloved name. So then I will conclude with the saying of Pindarus, "Optima res aqua;" not for the excellency, but for the common use of it; and so, contrariwise, the matter of abuse of purveyance, if it be not the most heinous abuse, yet certainly it is the most common and general abuse of all others in this kingdom.

It resteth, that, according to the command laid upon me, I do in all humbleness present this writing to your majesty's royal hands, with most humble petition on the behalf of the Commons, that as your majesty hath been pleased to vouchsafe your gracious audience to hear me speak, so you would be pleased to enlarge your patience to hear this writing read, which is more material.

A SPEECH

DELIVERED BY THE KING'S ATTORNEY,

SIR FRANCIS BACON,

IN THE LOWER HOUSE,

WHEN THE HOUSE WAS IN GREAT HEAT, AND MUCH TROUBLED ABOUT THE UNDERTAKERS

WHICH WERE THOUGHT TO BE SOME ABLE AND FORWARD GENTLEMEN; WHO, TO INGRATIATE THEMSELVES WITH THE KING, WERE SAID TO HAVE UNDERTAKEN, THAT THE KING'S BUSINESS SHOULD PASS IN THAT HOUSE AS HIS MAJESTY COULD WISH.

[IN THE PARLIAMENT 12 JACOBI.]

Mr. Speaker,

I have been hitherto silent in this matter of undertaking, wherein, as I perceive, the House is much enwrapped.

First, because, to be plain with you, I did not well understand what it meant, or what it was; and I do not love to offer at that that I do not thoroughly conceive. That private men should undertake for the Commons of England! why, a man might as well undertake for the four elements. It is a thing so giddy, and so vast, as cannot enter into the brain of a sober man: and, especially, in a new parliament; when it was impossible to know who should be of the parliament: and when all men, that know never so little the constitution of this House, do know it to be so open to reason, as men do not know when they enter into these doors what mind themselves will be of, until they hear things argued and debated. Much less can any man make a policy of assurance, what ship shall come safe home into the harbour in these seas. I had heard of undertakings in several kinds. There were undertakers for the plantations of Derry and Colerane, in Ireland, the better to command and bridle those parts. There were, not long ago, some undertakers for the north-west passage: and now there are some undertakers for the project of dyed and dressed cloths; and, in short, every novelty useth to be strengthened and made good by a kind of undertaking; but for the ancient parliament of England, which moves in a certain manner and sphere, to be undertaken, it passes my reach to conceive what it should be. Must we be all dyed and dressed, and no pure whites amongst us? Or must there be a new passage found for the king's business, by a point of the compass that was never sailed by before? Or must there be some forts built in this House, that may command and contain the rest? Mr. Speaker, I know but two forts in this House which the king ever hath; the fort of affection, and the fort of reason: the one commands the hearts, and the other commands the heads; and others I know none. I think Æsop was a wise man that described the nature of the fly, that sat upon the spoke of the chariot wheel, and said to herself, "What a dust do I raise!" So, for my part, I think that all this dust is raised by light rumours and buzzes, and not upon any solid ground.

The second reason that made me silent was, because this suspicion and rumour of undertaking, settles upon no person certain. It is like the birds of Paradise that they have in the Indies, that have no feet; and, therefore, they never light upon any place, but the wind carries them away: and such a thing do I take this rumour to be.

And, lastly, when that the king had, in his two several speeches, freed us from the main of our fears, in affirming directly, that there was no undertaking to him; and that he would have taken it to be no less derogation to his own majesty than to our merits, to have the acts of his people transferred to particular persons; that did quiet me thus far, that these vapours were not gone up to the head, howsoever they might glow and estuate in the body.

Nevertheless, since I perceive that this cloud still hangs over the House, and that it may do hurt, as well in fame abroad as in the king's ear, I resolved with myself to do the part of an honest voice in this House, to counsel you what I think to be for the best.

Wherein, first, I will speak plainly of the pernicious effects of the accident of this bruit and opinion of undertaking, towards particulars, towards the House, towards the king, and towards the people.

Secondly, I will tell you, in mine opinion, what undertaking is tolerable, and how far it may be justified with a good mind; and, on the other side, this same ripping up of the question of undertakers, how far it may proceed from a good mind, and in what kind it may be thought malicious and dangerous.

Thirdly, I will give you my poor advice, what means there are to put an end to this question of undertaking; not falling, for the present, upon a precise opinion, but breaking it, how many ways there be by which you may get out of it, and leaving the choice of them to a debate at the committee.

And, lastly, I will advise you how things are to be handled at the committee, to avoid distraction and loss of time.

For the first of these, I can say to you but as the Scripture saith, "Si invicem mordetis, ab invicem consumemini;" if ye fret and gall one another's reputation, the end will be, that every man shall go hence, like coin cried down, of less price than he came hither. If some shall be thought to fawn upon the king's business openly, and others to cross it secretly, some shall be thought practisers that would pluck the cards, and others shall be thought Papists that would shuffle the cards; what a misery is this, that we should come together to fool one another, instead of procuring the public good.

And this ends not in particulars, but will make the whole House contemptible: for now I hear men say, that this question of undertaking is the predominant matter of this House. So that we are now, according to the parable of Jotham, in the case of the trees of the forest, that when question was, Whether the vine should reign over them? that might not be: and whether the olive should reign over them? that might not be: but we have accepted the bramble to reign over us. For, it seems, that the good vine of the king's graces, that is not so much in esteem; and the good oil, whereby we should salve and relieve the wants of the estate and crown, that is laid aside too: and this bramble of contention and emulation; this Abimelech, which, as was truly said by an understanding gentleman, is a bastard, for every fame that wants a head, is "filius populi," this must reign and rule amongst us.

Then for the king, nothing can be more opposite, "ex diametro," to his ends and hopes, than this: for you have heard him profess like a king, and like a gracious king, that he doth not so much respect his present supply, as this demonstration that the people's hearts are more knit to him than before. Now, then, if the issue shall be this, that whatsoever shall be done for him shall be thought to be done but by a number of persons that shall be laboured and packed; this will rather be a sign of diffidence and alienation, than of a natural benevolence and affection in his people at home; and rather matter of disreputation, than of honour abroad. So that, to speak plainly to you, the king were better call for a new pair of cards, than play upon these if they be packed.

And then, for the people, it is my manner ever to look as well beyond a parliament, as upon a parliament; and if they abroad shall think themselves betrayed by those that are their deputies and attorneys here, it is true we may bind them and conclude them, but it will be with such murmur and insatisfaction as I would be loath to see.

These things might be dissembled, and so things left to bleed inwards; but that is not the way to cure them. And, therefore, I have searched the sore, in hope that you will endeavour the medicine.

But this to do more thoroughly, I must proceed to my second part, to tell you clearly and distinctly, what is to be set on the right hand, and what on the left, in this business.

First, if any man hath done good offices to advise the king to call a parliament, and to increase the good affection and confidence of his majesty towards his people; I say, that such a person doth rather merit well, than commit any error. Nay, further, if any man hath, out of his own good mind, given an opinion touching the minds of the parliament in general; how it is probable they are like to be found, and that they will have a due feeling of the king's wants, and will not deal dryly or illiberally with him; this man, that doth but think of other men's minds, as he finds his own, is not to be blamed. Nay, further, if any man hath coupled this with good wishes and propositions, that the king do comfort the hearts of his people, and testify his own love to them, by filing off the harshness of his prerogative, retaining the substance and strength; and to that purpose, like the good householder in the Scripture, that brought forth old store and new, hath revolved the petitions and propositions of the last parliament, and added new; I say, this man hath sown good seed; and he that shall draw him into envy for it, sows tares. Thus much of the right hand. But, on the other side, if any shall mediately or immediately infuse into his majesty, or to others, that the parliament is, as Cato said of the Romans, "like sheep, that a man were better drive a flock of them than one of them:" and, however, they may be wise men severally, yet, in this assembly, they are guided by some few, which, if they be made and assured, the rest will easily follow: this is a plain robbery of the king of honour, and his subjects of thanks, and it is to make the parliament vile and servile in the eyes of their sovereign; and I count it no better than a supplanting of the king and kingdom. Again, if a man shall make this impression, that it shall be enough for the king to send us some things of show, that may serve for colours, and let some eloquent tales be told of them, and that will serve "ad faciendum populum;" any such person will find that this House can well skill of false lights, and that it is no wooing tokens, but the true love already planted in the breast of the subjects, that will make them do for the king. And this is my opinion touching

those that may have persuaded a parliament. Take it on the other side, for I mean, in all things, to deal plainly, if any man hath been diffident touching the call of a parliament, thinking that the best means were, first, for the king to make his utmost trial to subsist of himself, and his own means; I say, an honest and faithful heart might consent to that opinion, and the event, it seems, doth not greatly discredit it hitherto. Again, if any man shall have been of opinion, that it is not a particular party that can bind the House; nor that it is not shows or colours can please the House; I say, that man, though his speech tend to discouragement, yet it is coupled with providence. But, by your leave, if any man, since the parliament was called, or when it was in speech, shall have laid plots to cross the good will of the parliament to the king, by possessing them that a few shall have the thanks, and that they are, as it were, bought and sold, and betrayed; and that that which the king offers them, are but baits prepared by particular persons; or have raised rumours that it is a packed parliament; to the end nothing may be done, but that the parliament may be dissolved, as gamesters used to call for new cards, when they mistrust a pack: I say, these are engines and devices naught, malign, and seditious.

Now for the remedy; I shall rather break the matter, as I said in the beginning, than advise positively. I know but three ways. Some message of declaration to the king; some entry or protestation amongst ourselves; or some strict and punctual examination. As for the last of these, I assure you I am not against it, if I could tell where to begin, or where to end. For certainly I have often seen it, that things when they are in smother trouble more than when they break out. Smoke blinds the eyes, but when it blazeth forth into flame it gives light to the eyes. But then if you fall to examination, some person must be charged, some matter must be charged; and the manner of that matter must be likewise charged; for it may be in a good fashion, and it may be in a bad, in as much difference as between black and white: and then how far men will ingenuously confess, how far they will politicly deny, and what we can make and gather upon their confession, and how we shall prove against their denial; it is an endless piece of work, and I doubt that we shall grow weary of it.

For a message to the king, it is the course I like best, so it be carefully and considerately handled: for if we shall represent to the king the nature of this body as it is, without the veils or shadows that have been cast upon it, I think we shall do him honour, and ourselves right.

For any thing that is to be done amongst ourselves, I do not see much gained by it, because it goes no farther than ourselves; yet if any thing can be wisely conceived to that end, I shall not be against it; but I think the purpose of it is fittest to be, rather that the House conceives that all this is but a misunderstanding, than to take knowledge that there is indeed a just ground, and then to seek, by a protestation, to give it a remedy. For protestations, and professions, and apologies, I never found them very fortunate; but they rather increase suspicion than clear it.

Why, then, the last part is, that these things be handled at the committee seriously and temperately; wherein I wish that these four degrees of questions were handled in order.

First, Whether we shall do any thing at all in it, or pass by it, and let it sleep?

Secondly, Whether we shall enter into a particular examination of it?

Thirdly, Whether we shall content ourselves with some entry or protestation among ourselves?

And, fourthly, Whether we shall proceed to a message to the king; and what?

Thus I have told you my opinion. I know it had been more safe and politic to have been silent; but it is perhaps more honest and loving to speak. The old verse is "Nam nulli tacuisse nocet, nocet esse locutum." But, by your leave, David saith, "Silui a bonis, et dolor meus renovatus est." When a man speaketh, he may be wounded by others; but if he hold his peace from good things, he wounds himself. So I have done my part, and leave it to you to do that which you shall judge to be the best.

A SPEECH

USED

TO THE KING BY HIS MAJESTY'S SOLICITOR,

BEING CHOSEN BY THE COMMONS AS THEIR MOUTH AND MESSENGER, FOR THE PRESENTING TO HIS MAJESTY THE INSTRUMENT OR WRITING OF

THEIR GRIEVANCES.

IN THE PARLIAMENT 7 JACOBI.

MOST GRACIOUS SOVEREIGN,

THE knights, citizens, and burgesses assembled in parliament, in the house of your Commons, in all humbleness do exhibit and present unto your most sacred majesty, in their own words, though by my hand, their petitions and grievances. They are here conceived and set down in writing, according to ancient custom of parliament: they are also prefaced according to the manner and taste of these later times. Therefore, for me to make any additional preface, were neither warranted nor convenient; especially speaking before a king, the exactness of whose judgment ought to scatter and chase away all unnecessary speech, as the sun doth a vapour. This only I must say; since this session of parliament we have seen your glory in the solemnity of the creation of this most noble prince; we have heard your wisdom in sundry excellent speeches which you have delivered amongst us; now we hope to find and feel the effects of your goodness, in your gracious answer to these our petitions. For this, we are persuaded, that the attribute which was given by one of the wisest writers to two of the best emperors, "Divus Nerva et divus Trajanus," so saith Tacitus, "res olim insociabiles miscuerunt, imperium et libertatem;" may be truly applied to your majesty. For never was there such a conservator of regality in a crown, nor ever such a protector of lawful freedom in a subject.

Only this, excellent sovereign, let not the sound of grievances, though it be sad, seem harsh to your princely ears: it is but "gemitus columbæ," the mourning of a dove; with that patience and humility of heart which appertaineth to loving and loyal subjects. And far be it from us, but that in the midst of the sense of our grievances we should remember and acknowledge the infinite benefits which, by your majesty, next under God, we do enjoy; which bind us to wish unto your life fulness of days; and unto your line royal a succession and continuance, even unto the world's end.

It resteth, that unto these petitions here included I do add one more that goeth to them all: which is, that if in the words and frame of them there be any thing offensive; or that we have expressed ourselves otherwise than we should or would; that your majesty would cover it and cast the veil of your grace upon it; and accept of our good intentions, and help them by your benign interpretation.

Lastly, I am most humbly to crave a particular pardon for myself, that have used these few words; and scarcely should have been able to have used any at all, in respect of the reverence which I bear to your person and judgment, had I not been somewhat relieved and comforted by the experience which, in my service and access, I have had of your continual grace and favour.

A

SPEECH OF THE KING'S SOLICITOR,

USED UNTO

THE LORDS AT A CONFERENCE BY COMMISSION FROM THE COMMONS, MOVING AND PERSUADING THE LORDS TO JOIN WITH THE COMMONS IN PETITION TO THE KING, TO OBTAIN LIBERTY TO TREAT OF A COMPOSITION WITH HIS MAJESTY FOR

WARDS AND TENURES.

IN THE PARLIAMENT 7 JACOBI.

The knights, citizens, and burgesses of the House of Commons have commanded me to deliver to your lordships the causes of the conference by them prayed, and by your lordships assented, for the second business of this day. They have had report made unto them faithfully of his majesty's answer declared by my lord treasurer, touching their humble desire to obtain liberty from his majesty to treat of compounding for tenures. And, first, they think themselves much bound unto his majesty, that in "re nova," in which case princes use to be apprehensive, he hath made a gracious construction of their proposition. And so much they know of that, that belongs to the greatness of his majesty, and the greatness of the cause, as themselves acknowledge they ought not to have expected a present resolution, though the wise man saith, "Hope deferred is the fainting of the soul." But they know their duty to be to attend his majesty's times at his good pleasure. And this they do with the more comfort, because that in his majesty's answer, matching the times, and weighing the passages thereof, they conceive, in their opinion, rather hope than discouragement.

But the principal causes of the conference now prayed, besides these significations of duty not to be omitted, are two propositions. The one, matter of excuse of themselves; the other, matter of petition. The former of which grows thus. Your lordship, my lord treasurer, in your last declaration of his majesty's answer, according to the attribute then given unto it by a great counsellor, had "imaginem Cæsaris" fair and lively graven, made this true and effectual distribution, that there depended upon tenures, considerations of honour, of conscience, and of utility. Of these three, utility, as his majesty set it by for the present, out of the greatness of his mind, so we set it by, out of the justness of our desires: for we never meant but a goodly and worthy augmentation of the profit now received, and not a diminution. But, to speak truly, that consideration falleth naturally to be examined when liberty of treaty is granted: but the former two indeed may exclude treaty, and cut it off before it be admitted.

Nevertheless, in this that we shall say concerning those two, we desire to be conceived rightly: we mean not to dispute with his majesty what belongeth to sovereign honour or his princely conscience; because we know we are not capable to discern of them otherwise than as men use sometimes to see the image of the sun in a pail of water. But this we say for ourselves, God forbid that we, knowingly, should have propounded any thing, that might in our sense and persuasion touch either or both; and therefore herein we desire to be heard, not to inform or persuade his majesty, but to free and excuse ourselves.

And, first, in general, we acknowledge, that this tree of tenures was planted into the prerogative by the ancient common law of this land: that it hath been fenced in and preserved by many statutes, and that it yieldeth at this day to the king the fruit of a great revenue. But yet, notwithstanding, if upon the stem of this tree may be raised a pillar of support to the crown permanent and durable as the marble, by investing the crown with a more ample, more certain, and more loving dowry, than this of tenures; we hope we propound no matter of disservice.

But to speak distinctly of both, and first of honour: wherein I pray your lordships, give me leave, in a subject that may seem "supra nos," to handle it rather as we are capable, than as the matter perhaps may require. Your lordships well know the various mixture and composition of our House. We have in our House learned civilians that profess a law, that we reverence and sometimes consult with: they can tell us, that all the laws "de feodis" are but additionals to the ancient civil law; and that the Roman emperors, in the full height of their monarchy, never knew them; so that they are not imperial. We have grave professors of the common law, who will define unto us that those are parts of sovereignty,

and of the regal prerogative, which cannot be communicated with subjects: but for tenures in substance, there is none of your lordships but have them, and few of us but have them. The king, indeed, hath a priority or first service of his tenures; and some more amplitude of profit in that we call tenure in chief: but the subject is capable of tenures; which shows that they are not regal, nor any point of sovereignty. We have gentlemen of honourable service in the wars both by sea and land, who can inform us, that when it is in question, who shall set his foot foremost towards the enemy; it is never asked, Whether he holds in knight's service or in socage? So have we many deputy lieutenants to your lordships, and many commissions that have been for musters and levies, that can tell us, that the service and defence of the realm hath in these days little dependence upon tenures. So, then, we perceive that it is no bond or ligament of government; no spur of honour, no bridle of obedience. Time was, when it had other uses, and the name of knight's service imports it: but "vocabula manent, res fugiunt." But all this which we have spoken we confess to be but in a vulgar capacity; which, nevertheless, may serve for our excuse, though we submit the thing itself wholly to his majesty's judgment.

For matter of conscience, far be it from us to cast in any thing willingly, that may trouble that clear fountain of his majesty's conscience. We do confess it is a noble protection, that these young birds of the nobility and good families should be gathered and clocked under the wings of the crown. But yet "Naturæ vis maxima:" and "Suus cuique discretus sanguis." Your lordships will favour me, to observe my former method. The common law itself, which is the best bounds of our wisdom, doth, even "in hoc individuo," prefer the prerogative of the father before the prerogative of the king: for if lands descend, held in chief from an ancestor on the part of a mother, to a man's eldest son, the father being alive, the father shall have the custody of the body, and not the king. It is true that this is only for the father, and not any other parent or ancestor: but then if you look to the high law of tutelage and protection, and of obedience and duty, which is the relative thereunto: it is not said, "Honour thy father alone," but "Honour thy father and thy mother," &c. Again, the civilians can tell us, that there was a special use of the pretorian power for pupils, and yet no tenures. The citizens of London can tell us, there be courts of orphans, and yet no tenures. But all this while we pray your lordships to conceive, that we think ourselves not competent to discern of the honour of his majesty's crown, or the shrine of his conscience; but leave it wholly unto him, and allege these things but in our own excuse.

For matter of petition, we do continue our most humble suit, by your lordships' loving conjunction, that his majesty will be pleased to open unto us this entrance of his bounty and grace, as to give us liberty to treat. And, lastly, we know his majesty's times are not subordinate at all but to the globe above. About this time the sun hath got even with the night, and will rise apace; and we know Solomon's temple, whereof your lordship, my lord treasurer, spake, was not built in a day: and if we shall be so happy as to take the axe to hew, and the hammer to frame, in this case, we know it cannot be without time; and, therefore, as far as we may with duty, and without importunity, we most humbly desire an acceleration of his majesty's answer, according to his good time and royal pleasure.

A FRAME OF DECLARATION

FOR THE

MASTER OF THE WARDS,

AT HIS FIRST SITTING.

The king, whose virtues are such, as if we, that are his ministers, were able duly to correspond unto them, it were enough to make a golden time, hath commanded certain of his intentions to be published, touching the administration of this place, because they are somewhat differing from the usage of former times, and yet not by way of novelty, but by way of reformation, and reduction of things to their ancient and true institution.

Wherein, nevertheless, it is his majesty's express pleasure it be signified, that he understands this to be done, without any derogation from the memory or service of those great persons which have formerly held this place, of whose doings

his majesty retaineth a good and gracious remembrance, especially touching the sincerity of their own minds.

But, now that his majesty meaneth to be as it were master of the wards himself, and that those that he useth be as his substitutes, and move wholly in his motion; he doth expect things be carried in a sort worthy his own care.

First, therefore, his majesty hath had this princely consideration with himself, that as he is "pater patriæ," so he is by the ancient law of this kingdom "pater pupillorum," where there is any tenure by knight's service of himself; which extendeth almost to all the great families noble and generous of this kingdom: and, therefore, being a representative father, his purpose is to imitate, and approach as near as may be to the duties and offices of a natural father, in the good education, well bestowing in marriage, and preservation of the houses, woods, lands, and estates of his wards.

For, as it is his majesty's direction, that that part which concerns his own profit and right be executed with moderation; so, on the other side, it is his princely will that that other part, which concerneth protection, be overspread and extended to the utmost.

Wherein his majesty hath three persons in his eye, the wards themselves, idiots, and the rest of like nature; the suitors in this court; and the subjects at large.

For the first, his majesty hath commanded special care to be taken in the choice of the persons, to whom they be committed, that the same be sound in religion, such whose house and families are not noted for dissolute, no greedy persons, no step-mothers, nor the like; and with these qualifications, of the nearest friends: nay, further, his majesty is minded not so to delegate this trust to the committees, but that he will have, once in the year at least, by persons of credit in every county, a view and inspection taken of the persons, houses, woods, and lands of the wards, and other persons under the protection of this court, and certificate to be made thereof accordingly.

For the suitors, which is the second; his majesty's princely care falls upon two points of reformation; the first, that there be an examination of fees, what are due and ancient, and what are new and exacted; and those of the latter kind put down: the other, that the court do not entertain causes too long upon continuances of liveries after the parties are come of full age, which serveth but to waste the parties in suit, considering the decrees cannot be perpetual, but temporary; and, therefore, controversies here handled, are seldom put in peace, till they have past a trial and decision in other courts.

For the third, which is the subject at large; his majesty hath taken into his princely care the unnecessary vexations of his people by feodaries, and other inferior ministers of like nature, by colour of his tenures; of which part I say nothing for the present, because the parties whom it concerns are for the most part absent: but order shall be given, that they shall give their attendance the last day of the term, then to understand further his majesty's gracious pleasure.

Thus much by his majesty's commandment; now we may proceed to the business of the court.

DIRECTIONS

FOR THE MASTER OF THE WARDS TO OBSERVE, FOR HIS MAJESTY'S BETTER SERVICE, AND THE GENERAL GOOD.

First, That he take an account how his majesty's last instructions have been pursued; and of the increase of benefit accrued to his majesty thereby, and the proportion thereof.

Wherein first, in general, it will be good to cast up a year's benefit, viz.: from February, 1610, which is the date of the instructions under the great seal, to February, 1611; and to compare the total with the former years before the instructions, that the tree may appear by the fruit, and it may be seen how much his majesty's profit is redoubled or increased by that course.

Secondly, It will not be amiss to compute not only the yearly benefit, but the number of wardships granted that year, and to compare that with the number of former years; for though the number be a thing casual, yet if it be apparently less than in former years, then it may be justly doubted, that men take advantage upon the last clause in the instructions, of exceptions of wards concealed, to practise delays and misfinding of offices, which is a thing most dangerous.

Thirdly, In particular it behooveth to peruse and review the bargains made, and to consider the rates, men's estates being things which for the most part cannot be hid, and thereby to discern what improvements and good husbandry have been used, and how much the king hath more now, when the whole benefit is supposed to go to him, than he had when three parts of the benefit went to the committee.

Fourthly, It is requisite to take consideration what commissions have been granted for copyholds for lives, which are excepted by the instructions from being leased, and what profit hath been raised thereby.

Thus much for the time past, and upon view of these accounts, "res dabit consilium" for further order to be taken.

For the time to come, first, it is fit that the master of the wards, being a meaner person, be usually present as well at the treaty and beating of the bargain, as at the concluding, and that he take not the business by report.

Secondly, When suit is made, the information

by survey and commission is but one image, but the way were by private diligence to be really informed: neither is it hard for a person that liveth in an inn of court, where there be understanding men of every county of England, to obtain by care certain information.

Thirdly, This kind of promise of preferring the next akin, doth much obscure the information, which before by competition of divers did better appear; and therefore it may be necessary for the master of the wards sometimes to direct letters to some persons near the ward living, and to take certificate from them: it being always intended the subject be not racked too high, and that the nearest friends that be sound in religion, and like to give the ward good education, be preferred.

Fourthly, That it be examined carefully whether the ward's revenues consist of copyholds for lives, which are not to be comprised in the lease, and that there be no neglect to grant commissions for the same, and that the master take order to be certified of the profits of former courts held by the ward's ancestor, that it may be a precedent and direction for the commissioners.

Fifthly, That the master make account every six months (the state appoints one in the year) to his majesty; and that when he bringeth the bill of grants of the body for his majesty's signature, he bring a schedule of the truth of the state of every one of them, as it hath appeared to him by information, and acquaint his majesty both with the rates and states.

Thus much concerning the improvement of the king's profit, which concerneth the king as "pater familias;" now as "pater patriæ."

First, For the wards themselves, that there be special care taken in the choice of the committee, that he be sound in religion, his house and family not dissolute, no greedy person, no step-mother, nor the like.

Further, That there be letters written once every year to certain principal gentlemen of credit in every county, to take view not only of the person of the wards in every county, and their education; but of their houses, woods, grounds, and estate, and the same to certify; that the committees may be held in some awe, and that the blessing of the poor orphans and the pupils may come upon his majesty and his children.

Secondly, For the suitors; that there be a strait examination concerning the raising and multiplication of fees in that court, which is much scandalized with opinion thereof, and all exacted fees put down.

Thirdly, For the subjects at large; that the vexation of escheators and feodaries be repressed, which, upon no substantial ground of record, vex the country with inquisitions and other extortions: and for that purpose that there be one set day at the end of every term appointed for examining the abuses of such inferior officers, and that the master of wards take special care to receive private information from gentlemen of quality and conscience in every shire touching the same.

A

SPEECH OF THE KING'S SOLICITOR,

PERSUADING

THE HOUSE OF COMMONS

TO DESIST FROM FARTHER QUESTION OF

RECEIVING THE KING'S MESSAGES.

BY THEIR SPEAKER, AND FROM THE BODY OF THE COUNCIL, AS WELL AS FROM THE KING'S PERSON

IN THE PARLIAMENT 7 JACOBI

It is my desire, that if any the king's business, either of honour or profit, shall pass the House, it may be not only with external prevailing, but with satisfaction of the inward man. For in consent, where tongue-strings, not heart-strings, make the music, that harmony may end in discord. To this I shall always bend my endeavours.

The king's sovereignty, and the liberty of parliament, are as the two elements and principles of this estate; which, though the one be more active, the other more passive, yet they do not

cross or destroy the one the other. But they strengthen and maintain the one the other. Take away liberty of parliament, the griefs of the subject will bleed inwards: sharp and eager humours will not evaporate; and then they must exulcerate; and so may endanger the sovereignty itself. On the other side, if the king's sovereignty receive diminution, or any degree of contempt with us that are born under an hereditary monarchy, so as the motions of our estate cannot work in any other frame or engine, it must follow, that we shall be a meteor, or "corpus imperfecte mistum;" which kind of bodies come speedily to confusion and dissolution. And herein it is our happiness, that we may make the same judgment of the king, which Tacitus made of Nerva: "Divus Nerva res olim dissociabiles miscuit, imperium et libertatem." Nerva did temper things, that before were thought incompatible, or insociable, sovereignty and liberty. And it is not amiss in a great council and a great cause to put the other part of the difference, which was significantly expressed by the judgment which Apollonius made of Nero; which was thus: when Vespasian came out of Judæa towards Italy, to receive the empire, as he passed by Alexandria he spake with Apollonius, a man much admired, and asked him a question of state: "What was the cause of Nero's fall or overthrow?" Apollonius answered again, "Nero could tune the harp well: but in government he always either wound up the pins too high, and strained the strings too far; or let them down too low, and slackened the strings too much." Here we see the difference between regular and able princes, and irregular and incapable, Nerva and Nero. The one tempers and mingles the sovereignty with the liberty of the subject wisely; and the other doth interchange it, and vary it unequally and absurdly. Since, therefore, we have a prince of so excellent wisdom and moderation, of whose authority we ought to be tender, as he is likewise of our liberty, let us enter into a true and indifferent consideration, how far forth the case in question may touch his authority, and how far forth our liberty: and, to speak clearly, in my opinion it concerns his authority much, and our liberty nothing at all.

The questions are two: the one, whether our speaker be exempted from delivery of a message from the king without our license? The other, whether it is not all one whether he received it from the body of the council, as if he received it immediately from the king? And I will speak of the last first, because it is the circumstance of the present case.

First, I say, let us see how it concerns the king, and then how it concerns us. For the king, certainly, if it be observed, it cannot be denied, but if you may not receive his pleasure by his representative body, which is his council of his estate, you both straiten his majesty in point of conveniency, and weaken the reputation of his council. All kings, though they be live gods on earth, yet, as he said, they are gods of earth, frail as other men; they may be children; they may be of extreme age; they may be indisposed in health; they may be absent. In these cases, if their council may not supply their persons, to what infinite accidents do you expose them? Nay, more, sometimes in policy kings will not be seen, but cover themselves with their council; and if this be taken from them, a great part of their safety is taken away. For the other point, of weakening the council; you know they are nothing without the king: they are no body politic; they have no commission under seal. So as, if you begin to distinguish and disjoin them from the king, they are "corpus opacum;" for they have "lumen de lumine:" and so by distinguishing you extinguish the principal engine of the estate. For it is truly affirmed, that "Concilium non habet potestatem delegatam, sed inhærentem:" and it is but "Rex in cathedra," the king in his chair or consistory, where his will and decrees, which are in privacy more changeable, are settled and fixed.

Now, for that which concerns ourselves. First, for dignity; no man must think this a disparagement to us: for the greatest kings in Europe, by their ambassadors, receive answers and directions from the council in the king's absence; and if that negotiation be fit for the fraternity and party of kings, it may much less be excepted to by subjects.

For use or benefit, no man can be so raw and unacquainted in the affairs of the world, as to conceive there should be any disadvantage in it, as if such answers were less firm and certain. For it cannot be supposed, that men of so great caution, as counsellors of estate commonly are, whether you take caution for wisdom or providence, or for pledge of estate or fortune, will ever err, or adventure so far as to exceed their warrant. And, therefore, I conclude, that in this point there can be unto us neither disgrace nor disadvantage.

For the point of the speaker. First, on the king's part, it may have a shrewd illation; for it hath a show, as if there could be a stronger duty than the duty of a subject to a king. We see the degrees and differences of duties in families, between father and son, master and servant; in corporate bodies, between commonalties and their officers, recorders, stewards, and the like; yet all these give place to the king's commandments. The bonds are more special, but not so forcible. On our part, it concerns us nothing. For, first, it is but "de canali," of the pipe; how the king's message shall be conveyed to us, and not of the matter. Neither hath the speaker any such dominion, as that coming out of his mouth it presseth us more than out of a privy counsellor's. Nay, it seems to be a great trust of the king's towards

the House, when the king doubteth not to put his message into their mouth, as if he should speak to the city by their recorder: therefore, methinks we should not entertain this unnecessary doubt. It is one use of wit to make clear things doubtful; but it is a much better use of wit to make doubtful things clear; and to that I would men would bend themselves.

AN

ARGUMENT OF SIR FRANCIS BACON,

THE KING'S SOLICITOR,

IN THE LOWER HOUSE OF PARLIAMENT,

PROVING

THE KING'S RIGHT OF IMPOSITIONS ON MERCHANDISES IMPORTED AND EXPORTED.*

And it please you, Mr. Speaker, this question touching the right of impositions is very great; extending to the prerogative of the king on the one part, and the liberty of the subject on the other; and that in a point of profit and value, and not of conceit or fancy. And, therefore, as weight in all motions increaseth force, so I do not marvel to see men gather the greatest strength of argument they can to make good their opinions. And, so you will give me leave likewise, being strong in mine own persuasion that it is the king's right, to show my voice as free as my thought. And for my part, I mean to observe the true course to give strength to this cause, which is by yielding those things which are not tenable, and keeping the question within the true state and compass; which will discharge many popular arguments, and contract the debate into a less room.

Wherefore, I do deliver the question, and exclude or set by, as not in question, five things. First, the question is "de portorio," and not "de tributo," to use the Roman words for explanation sake; it is not, I say, touching any taxes within the land, but of payments at the ports. Secondly, it is not touching any impost from port to port, but where "claves regni," the keys of the kingdom, are turned to let in from foreign parts, or to send forth to foreign parts, in a word, matter of commerce and intercourse; not simply of carriage or vecture. Thirdly, the question is, as the distinction was used above in another case, "de vero et falso," and not "de bono et malo," of the legal point, and not of the inconvenience, otherwise than as it serves to decide the law. Fourthly, I do set apart three commodities, wool, woolfells, and leather, as being in different case from the rest; because the custom upon them is "antiqua custuma." Lastly, the question is not, whether in matter of imposing the king may alter the law by his prerogative, but whether the king have not such a prerogative by law.

The state of the question being thus cleared and freed, my proposition is, that the king by the fundamental laws of this kingdom hath a power to impose upon merchandise and commodities both native and foreign. In my proof of this proposition all that I shall say, be it to confirm or confute, I will draw into certain distinct heads or considerations which move me, and may move you.

The first is a universal negative: there appeareth not in any of the king's courts any one record, wherein an imposition laid at the ports hath been overthrown by judgment; nay, more, where it hath been questioned by pleading. This plea, "quod summa prædicta minus juste imposita fuit, et contra leges et consuetudines regni hujus Angliæ, unde idem Bates illam solvere recusavit, prout ei bene licuit;" is "primæ impressionis." Bates was the first man "ab origine mundi," for any thing that appeareth, that ministered that plea; whereupon I offer this true consideration: the king's acts that grieve the subject are either against law, and so void, or according to strictness of law, and yet grievous. And according to these several natures of grievance, there be several remedies: Be they against law? Overthrow them by judgment: Be they too strait and extreme, though legal? Propound them in parliament. Forasmuch, then, as impositions at the ports, having been so often laid, were never

* This matter was much debated by the lawyers and gentlemen in the Parliament 1610, and 1614, &c., and afterwards given up by the crown in 1641.

brought into the king's courts of justice, but still brought to parliament, I may most certainly conclude, that they were conceived not to be against law. And if any man shall think that it was too high a point to question by law before the judges, or that there should want fortitude in them to aid the subject; no, it shall appear from time to time, in cases of equal reach, where the king's acts have been indeed against law, the course of law hath run, and the judges have worthily done their duty.

As in the case of an imposition upon linen cloth for the alnage; overthrown by judgment.

The case of a commission of arrest and committing of subjects upon examination without conviction by jury, disallowed by the judges.

A commission to determine the right of the exigenter's place, "secundum sanam discretionem," disallowed by the judges.

The case of the monopoly of cards overthrown and condemned by judgment.

I might make mention of the jurisdiction of some courts of discretion, wherein the judges did not decline to give opinion. Therefore, had this been against law, there would not have been "altum silentium" in the king's courts. Of the contrary judgments I will not yet speak; thus much now, that there is no judgment, no, nor plea against it. Though I said no more, it were enough, in my opinion, to induce you to a "non liquet," to leave it a doubt.

The second consideration is, the force and continuance of payments made by grants of merchants, both strangers and English, without consent of parliament. Herein I lay this ground that such grants considered in themselves are void in law: for merchants, either strangers or subjects, they are no body corporate, but singular and dispersed persons; they cannot bind succession, neither can the major part bind the residue: how then should their grants have force? No otherwise but thus: that the king's power of imposing was only the legal virtue and strength of those grants; and that the consent of a merchant is but a concurrence; the king is "principale agens," and they are but as the patient, and so it becomes a binding act out of the king's power.

Now, if any man doubt that such grants of merchants should not be of force, I will allege but two memorable records, the one for the merchants strangers, the other for the merchants English. That for the strangers is upon the grant of "chart. mercator." of three pence in value "ultra antiquas custumas;" which grant is in use and practice at this day. For it is well known to the merchants, that that which they call stranger's custom, and erroneously double custom, is but three pence in the pound more than English. Now look into the statutes of subsidy of tonnage and poundage, and you shall find, a few merchandise only excepted, the poundage equal upon alien and subject; so that this difference or excess of three pence hath no other ground than that grant. It falleth to be the same in quantity; there is no statute for it, and, therefore, it can have no strength but from the merchants' grants; and the merchants' grants can have no strength but from the king's power to impose.

For the merchants English, take the notable record in 17 E. III., where the Commons complained of the forty shillings upon the sack of wool as a maltoll set by the assent of the merchants without consent of parliament; nay, they dispute and say it were hard that the merchants' consent should be in damage of the Commons. What saith the king to them? doth he grant it or give way to it? No; but replies upon them, and saith, It cannot be rightly construed to be in prejudice of the Commons, the rather because provision was made, that the merchants should not work upon them, by colour of that payment to increase their price; in that there was a price certain set upon the wools. And there was an end of that matter; which plainly affirmeth the force of the merchants' grants. So, then, the force of the grants of merchants, both English and strangers, appeareth, and their grants being not corporate, are but noun adjectives, without the king's power to impose.

The third consideration is, of the first and most ancient commencement of customs; wherein I am somewhat to seek; for, as the poet saith, "Ingrediturque solo, et caput inter nubila condit," the beginning of it is obscure: but I rather conceive that it is by common law than by grant in parliament. For, first, Mr. Dyer's opinion was, that the ancient custom for exportation was by the common laws; and goeth further, that that ancient custom was the custom upon wools, woolfells, and leather: he was deceived in the particular, and the diligence of your search hath revealed it; for that custom upon these three merchandises grew by grant of parliament 3 E. I.; but the opinion in general was sound; for there was a custom before that: for the records themselves which speak of that custom do term it a new custom, "Alentour del novel custome." As concerning the new custom granted, etc., this is pregnant, there was yet a more ancient. So for the strangers, the grant in 31 E. I. "chart. mercator." is, that the three pence granted by the strangers should be "ultra antiquas custumas," which hath no affinity with that custom upon the three species, but presupposeth more ancient customs in general. Now, if any man think that those more ancient customs were likewise by act of parliament, it is but a conjecture: it is never recited "ultra antiquas custumas prius concessas," and acts of parliament were not much stirring before the great charter, which was 9 H. III. And, therefore, I conceive with Mr. Dyer, that whatsoever was the ancient custom, was by the

common law. And it by the common law, then what other means can be imagined of the commencement of it but by the king's imposing?

The fourth consideration is, of the manner that was held in parliament in the abolishing of impositions laid: wherein I will consider, first, the manner of the petitions exhibited in parliament; and more especially the nature of the king's answers. For the petitions I note two things; first, that to my remembrance there was never any petition made for the revoking of any imposition upon foreign merchants only. It pleased the Decemviri in 5 E. II. to deface "chart. mercator." and so the imposition upon strangers, as against law: but the opinion of these reformers I do not much trust, for they of their gentleness did likewise bring in doubt the demy-mark, which it is manifest was granted by parliament, and pronounced by them the king should have it, "s'il avoit le doit:" but this is declared void by 1 E. III., which reneweth "chart. mercator." and void must it needs be, because it was an ordinance by commission only, and that in the time of a weak king, and never either warranted or confirmed by parliament. Secondly, I note that petitions were made promiscuously for taking away impositions set by parliament as well as without parliament; nay, that very tax of the "neufiesme," the ninth sheaf or fleece, which is recited to be against the king's oath, and in blemishment of his crown, was an act of parliament, 14 E. III. So, then, to infer that impositions were against law, because they are taken away by succeeding parliaments, it is no argument at all; because the impositions set by the parliaments themselves, which no man will say were against law, were, nevertheless, afterwards pulled down by parliament. But indeed the argument holdeth rather the other way, that because they took not their remedy in the king's courts of justice, but did fly to the parliament, therefore they were thought to stand with law.

Now for the king's answers: if the impositions complained of had been against law, then the king's answer ought to have been simple, "tanquam responsio categorica, non hypothetica;" as, Let them be repealed, or, Let the law run: but, contrariwise, they admit all manner of diversities and qualifications: for

Sometimes the king disputeth the matter and doth nothing; as 17 E. III.

Sometimes the king distinguisheth of reasonable and not reasonable, as 38 E. III.

Sometimes he abolisheth them in part, and letteth them stand in part, as 11 E. II., the record of the "mutuum," and 14 E. III., the printed statute, whereof I shall speak more anon

Sometimes that no imposition shall be set during the time that the grants made of subsidies by parliament shall continue, as 47 E. III.

Sometimes that they shall cease "ad voluntatem nostram."

And sometimes that they shall hold over their term prefixed or asseised.

All which showeth that the king did not disclaim them as unlawful, for "actus legitimus non recipit tempus aut conditionem." If it had been a disaffirmance by law, they must have gone down "in solido," but now you see they have been tempered and qualified as the king saw convenient.

The fifth consideration is of that which is offered by way of objection; which is, first, that such grants have been usually made by consent of parliament; and, secondly, that the statutes of subsidies of tonnage and poundage have been made as a kind of stint and limitation, that the king should hold himself unto the proportion so granted, and not impose further; the rather because it is expressed in some of these statues of tonnage and poundage, sometimes by way of protestation, and sometimes by way of condition, that they shall not be taken in precedent, or that the king shall not impose any further rates or novelties, as 6 R. II., 9 R. II., 13 H. IV., 1 H. V., which subsidies of tonnage and poundage have such clauses and cautions.

To this objection I give this answer. First, that it is not strange with kings, for their own better strength, and the better contentment of their people, to do those things by parliament, which, nevertheless, have perfection enough without parliament. We see their own rights to the crown, which are inherent, yet they take recognition of them by parliament. And there was a special reason why they should do it in this case, for they had found by experience that if they had not consent in parliament to the setting of them up, they could not have avoided suit in parliament for the taking of them down. Besides, there were some things requisite in the manner of the levy for the better strengthening of the same, which percase could not be done without parliament, as the taking the oath of the party touching the value, the inviting of the discovery of concealment of custom, by giving the moiety to the informer, and the like.

Now in special for the statutes of subsidies of tonnage and poundage, I note three things. First, that the consideration of the grant is not laid to be for the restraining of impositions, but expressly for the guarding of the sea. Secondly, that it is true that the ancient form is more peremptory, and the modern more submiss; for in the ancient form sometimes they insert a flat condition that the king shall not further impose; in the latter they humbly pray that the merchants may be demeaned without oppression, paying those rates;

but whether it be supplication, or whether it be condition, it rather implieth the king hath a power; for else both were needless, for "conditio annectitur ubi libertas præsumitur," and the word oppression seemeth to refer to excessive impositions. And, thirdly, that the statutes of tonnage and poundage are but "cumulative," and not "privative" of the king's power precedent, appeareth notably in the three pence overplus, which is paid by the merchants strangers, which should be taken away quite, if those statutes were taken to be limitations; for in that, as we touched before, the rates are equal in the generality between subjects and strangers, and yet that imposition, notwithstanding any supposed restriction of these acts of subsidies of tonnage and poundage, remaineth at this day.

The sixth consideration is likewise of an objection, which is matter of practice, viz.: that from R. II.'s time to Q. Mary, which is almost two hundred years, there was an intermission of impositions, as appeareth both by records and the custom-books.

To which I answer; both that we have in effect an equal number of years to countervail them, namely, one hundred years in the times of the three kings Edwards added to sixty of our last years; and "extrema obruunt media;" for we have both the reverence of antiquity and the possession of the present times, and they but the middle times; and, besides, in all true judgment there is a very great difference between an usage to prove a thing lawful, and a non-usage to prove it unlawful: for the practice plainly implieth consent; but the discontinuance may be either because it was not needful, though lawful; or because there was found a better means, as I think it was indeed in respect of the double customs by means of the staple at Calais.

A BRIEF SPEECH

IN THE END OF THE SESSION OF PARLIAMENT 7 JACOBI.

PERSUADING SOME SUPPLY TO BE GIVEN TO HIS MAJESTY; WHICH SEEMED THEN TO STAND UPON DOUBTFUL TERMS, AND PASSED UPON THIS SPEECH.

The proportion of the king's supply is not now in question: for when that shall be, it may be I shall be of opinion, that we should give so now, as we may the better give again. But as things stand for the present, I think the point of honour and reputation is that which his majesty standeth most upon, that our gift may at least be like those showers, that may serve to lay the winds, though they do not sufficiently water the earth.

To labour to persuade you, I will not: for I know not into what form to cast my speech. If I should enter into a laudative, though never so due and just, of the king's great merits, it may be taken for flattery: if I should speak of the strait obligations which intercede between the king and the subject, in case of the king's want, it were a kind of concluding the House: if I should speak of the dangerous consequence which want may reverberate upon subjects, it might have a show of a secret menace.

These arguments are, I hope, needless, and do better in your minds than in my mouth. But this, give me leave to say, that whereas the example of Cyrus was used, who sought his supply from those upon whom he had bestowed his benefits we must always remember, that there are as well benefits of the sceptre as benefits of the hand, as well of government as of liberality. These, I am sure, we will acknowledge to have come "plena manu" amongst us all, and all those whom we represent; and, therefore, it is every man's head in this case that must be his counsellor, and every man's heart his orator; and to those inward powers more forcible than any man's speech, I leave it, and wish it may go to the question.

A CERTIFICATE

TO

THE LORDS OF THE COUNCIL,

UPON INFORMATION GIVEN

TOUCHING THE SCARCITY OF SILVER AT THE MINT, AND REFERENCE TO THE TWO CHANCELLORS, AND THE KING'S SOLICITOR.

It may please your Lordships,

According unto your lordships' letters unto us directed, grounded upon the information which his majesty hath received concerning the scarcity of silver at the mint, we have called before us as well the officers of the mint, as some principal merchants, and spent two whole afternoons in the examination of the business; wherein we kept this order, first to examine the fact, then the causes, with the remedies.

And, for the fact, we directed the officers of the mint to give unto us a distinguished account how much gold and silver hath yearly been brought into the mint, by the space of six whole years last past, more especially for the last three months succeeding the last proclamation touching the price of gold; to the end we might by the suddenness of the fall discern, whether that proclamation might be thought the efficient cause of the present scarcity. Upon which account it appears to us, that during the space of six years aforesaid, there hath been still degrees of decay in quantity of the silver brought to the mint, but yet so, as within these last three months it hath grown far beyond the proportion of the former time, insomuch as there comes in now little or none at all. And, yet, notwithstanding, it is some opinion, as well amongst the officers of the mint as the merchants, that the state need be the less apprehensive of this effect, because it is like to be but temporary, and neither the great flush of gold that is come into the mint since the proclamation, nor, on the other side, the great scarcity of silver, can continue in proportion as it now doth.

Another point of the fact, which we thought fit to examine, was, whether the scarcity of silver appeared generally in the realm, or only at the mint; wherein it was confessed by the merchants, that silver is continually imported into the realm, and is found stirring amongst the goldsmiths, and otherwise, much like as in former times, although, in respect of the greater price which it hath with the goldsmith, it cannot find the way to the mint. And thus much for the fact.

For the causes with the remedies, we have heard many propositions made, as well by the Lord Knevet, who assisted us in this conference, as by the merchants; of which propositions few were new unto us, and much less can be new to your lordships; but yet, although upon former consultations, we are not unacquainted what is more or less likely to stand with your lordships' grounds and opinions, we thought it nevertheless the best fruit of our diligence to set them down in articles, that your lordships with more ease may discard or entertain the particulars, beginning with those which your lordships do point at in your letters, and so descending to the rest.

The first proposition is, touching the disproportion of the price between gold and silver, which is now brought to bed, upon the point of fourteen to one, being before but twelve to one. This we take to be an evident cause of scarcity of silver at the mint, but such a cause as will hardly receive a remedy; for either your lordships must draw down again the price of gold, or advance the price of silver; whereof the one is going back from that which is so lately done, and whereof you have found good effect, and the other is a thing of dangerous consequence, in respect of the loss to all moneyed men in their debts, gentlemen in their rents, the king in his customs, and the common subject in raising the price of things vendible. And upon this point it is fit we give your lordships understanding what the merchants intimated unto us, that the very voicing or suspect of the raising of the price of silver, if it be not cleared, would make such a deadness and retention of money this vacation, as, to use their own words, will be a misery to the merchants: so that we were forced to use protestation, that there was no such intent.

The second proposition, is touching the charge of coinage; wherein it was confidently avouched by the merchants, that if the coinage were brought from two shillings unto eighteen pence, as it was in Queen Elizabeth's time, the king would gain more in the quantity than he should lose in the price: and they aided themselves with that argument, that the king had been pleased to abate his coinage in the other metal, and found good of it: which argument, though it doth admit a difference, because that abatement was coupled with

the raising of the price, whereas this is to go alone; yet, nevertheless, it seemed the officers of the mint were not unwilling to give way to some abatement, although they presumed it would be of small effect, because that abatement would not be equivalent to that price which Spanish silver bears with the goldsmith; but yet it may be used as an experiment of state, being recoverable at his majesty's pleasure.

The third proposition is, concerning the exportation of silver more than in former times, wherein we fell first upon the trade into the East Indies; concerning which it was materially, in our opinions, answered by the merchants of that company, that the silver which supplies that trade, being generally Spanish moneys, would not be brought in but for that trade, so that it sucks in as well as it draws forth. And, it was added, likewise, that as long as the Low Countries maintained that trade in the Indies, it would help little, though our trade were dissolved, because that silver which is exported immediately by us to the Indies, would be drawn out of this kingdom, for the Indies, immediately by the Dutch: and for the silver exported to the Levant, it was thought to be no great matter. As for other exportation, we saw no remedy but the execution of the laws, specially those of employment, being, by some mitigation, made agreeable to the times. And these three remedies are of that nature, as they serve to remove the causes of this scarcity. There were other propositions of policies and means, directly to draw silver to the mint.

The fourth point thereof, was this: It is agreed that the silver which hath heretofore fed the mint, principally, hath been Spanish money. This now comes into the realm plentifully, but not into the mint. It was propounded, in imitation of some precedent in France, that his majesty would, by proclamation, restrain the coming in of this money "sub modo;" that is, that either it be brought to the mint, or otherwise to be but and defaced, because that now it passeth in payments in a kind of currency. To which it was colourably objected, that this would be the way to have none brought in at all, because the gain ceasing, the importation would cease; but this objection was well answered, that it is not gain altogether, but a necessity of speedy payment, that causeth the merchant to bring in silver to keep his credit, and to drive his trade: so that if the king keep his fourteen days' payment at the mint, as he always hath done, and have, likewise, his exchangers for those moneys, in some principal parts, it is supposed that all Spanish moneys, which is the bulk of silver brought into this realm, would, by means of such a proclamation, come into the mint; which may be a thing considerable.

The fifth proposition was this: It was warranted by the laws of Spain, to bring in silver for corn or victuals; it was propounded that his majesty would restrain exportation of corn "sub modo," except they bring the silver which resulted thereof, unto his mint; that trade being commonly so beneficial, as the merchant may well endure the bringing of the silver to the mint, although it were at the charge of coinage, which it now beareth further, as incident to this matter. There was revived by the merchants, with some instance, the ancient proposition, concerning the erection of granaries for foreign corn, forasmuch as, by that increase of trade in corn, the importation of silver would likewise be multiplied.

The sixth proposition was, That upon all license of forbidden commodities, there shall be a rate set of silver to be brought into the mint: which, nevertheless, may seem somewhat hard, because it imposeth upon the subject that which causeth him to incur peril of confiscation in foreign parts. To trouble your lordships further with discourses which we had of making foreign coins current, and of varying the king's standard to weight, upon the variations in other states, and repressing surfeit of foreign commodities, that our native commodities, surmounting the foreign, may draw in treasure by way of overplus; they be commonplaces so well known to your lordships, as it is enough to mention them only.

There is only one thing more, which is, to put your lordships in mind of the extreme excess in the wasting of both metals, both of gold and silver foliate, which turns the nature of these metals, which ought to be perdurable, and makes them perishable, and, by consumption, must be a principal cause of scarcity in them both; which, we conceive, may receive a speedy remedy by his majesty's proclamation.

Lastly, We are humble suitors to your lordships, that for any of these propositions, that your lordships should think fit to entertain in consultations, your lordships would be pleased to hear them debated before yourselves, as being matters of greater weight than we are able to judge of. And so, craving your lordships' pardon for troubling you so long, we commend your lordships to God's goodness.

HIS LORDSHIP'S SPEECH

IN THE PARLIAMENT,

BEING LORD CHANCELLOR,

TO

THE SPEAKER'S EXCUSE.

Mr. Serjeant Richardson,

The king hath heard and observed your grave and decent speech, tending to the excuse and disablement of yourself for the place of speaker. In answer whereof, his majesty hath commanded me to say to you, that he doth in no sort admit of the same.

First, Because if the party's own judgment should be admitted in case of elections, touching himself, it would follow, that the most confident and overweening persons would be received; and the most considerate men, and those that understand themselves best, would be rejected.

Secondly, His majesty doth so much rely upon the wisdoms and discretions of those of the House of Commons, that have chosen you with a unanimous consent, that his majesty thinks not good to swerve from their opinion in that wherein themselves are principally interested.

Thirdly, You have disabled yourself in so good and decent a fashion, as the manner of your speech hath destroyed the matter of it.

And, therefore, the king doth allow of the election, and admit you for speaker.

TO THE SPEAKER'S ORATION.

Mr. Speaker,

The king hath heard and observed your eloquent discourse, containing much good matter, and much good will: wherein you must expect from me such an answer only as is pertinent to the occasion, and compassed by due respect of time.

I may divide that which you have said into four parts.

The first was a commendation, or laudative of monarchy.

The second was indeed a large field, containing a thankful acknowledgment of his majesty's benefits, attributes, and acts of government.

The third was some passages touching the institution and use of parliaments.

The fourth and last was certain petitions to his majesty on the behalf of the House and yourself.

For your commendation of monarchy, and preferring it before other estates, it needs no answer; the schools may dispute it; but time hath tried it, and we find it to be the best. Other states have curious frames, soon put out of order: and they that are made fit to last, are not commonly fit to grow or spread: and, contrariwise, those that are made fit to spread and enlarge, are not fit to continue and endure. But monarchy is like a work of nature, well composed both to grow and to continue. From this I pass.

For the second part of your speech, wherein you did with no less truth than affection acknowledge the great felicity which we enjoy by his majesty's reign and government, his majesty hath commanded me to say unto you, that praises and thanksgivings he knoweth to be the true oblations of hearts and loving affections: but that which you offer him he will join with you, in offering it up to God, who is the author of all good; who knoweth also the uprightness of his heart; who he hopeth will continue and increase his blessings both upon himself and his posterity, and likewise upon his kingdoms and the generations of them.

But I for my part must say unto you, as the Grecian orator said long since in the like case: "Solus dignus harum rerum laudatur tempus;" Time is the only commender and encomiastic worthy of his majesty and his government.

Why time? For that, in the revolution of so many years and ages as have passed over this kingdom, notwithstanding, many noble and excellent effects were never produced until his majesty's days, but have been reserved as proper and peculiar unto them.

And because this is no part of a panegyric, but merely story, and that they be so many articles of honour fit to be recorded, I will only mention them, extracting part of them out of that you, Mr. Speaker, have said; they be in number eight.

First, his majesty is the first, as you noted it well, that hath laid "lapis angularis," the corner stone of these two mighty kingdoms of England and Scotland, and taken away the wall of seperation: whereby his majesty is become the mo-

narch of the most puissant and military nations of the world; and, if one of the ancient wise men was not deceived, iron commands gold.

Secondly, the plantation and reduction to civility of Ireland, the second island of the ocean Atlantic, did by God's providence wait for his majesty's times; being a work resembling indeed the works of the ancient heroes: no new piece of that kind in modern times.

Thirdly, This kingdom, now first in his majesty's times, hath gotten a lot or portion in the new world, by the plantation of Virginia and the Summer Islands. And certainly it is with the kingdoms on earth as it is in the kingdom of heaven: sometimes a grain of mustard-seed proves a great tree. Who can tell?

Fourthly, His majesty hath made that truth which was before titularly, in that he hath verified the style of Defender of the Faith: wherein his majesty's pen hath been so happy, as, though the deaf adder will not hear, yet he is charmed that he doth not hiss. I mean in the graver sort of those that have answered his majesty's writings.

Fifthly, It is most certain, that since the conquest ye cannot assign twenty years, which is the time that his majesty's reign now draws fast upon, of inward and outward peace. Insomuch, as the time of Queen Elizabeth, of happy memory, and always magnified for a peaceable reign, was nevertheless interrupted the first twenty years with a rebellion in England; and both first and last twenty years with rebellions in Ireland. And yet I know, that his majesty will make good both his words, as well that of "Nemo me lacessit impune," as that other of "Beati pacifici."

Sixthly, That true and primitive office of kings, which is, to sit in the gate and to judge the people, was never performed in like perfection by any of the king's progenitors: whereby his majesty hath showed himself to be "lex loquens," and to sit upon the throne, not as a dumb statue, but as a speaking oracle.

Seventhly, For his majesty's mercy, as you noted it well, show me a time wherein a king of this realm hath reigned almost twenty years, as I said, in his white robes, without the blood of any peer of this kingdom: the axe turned once or twice towards a peer, but never struck.

Lastly, The flourishing of arts and sciences recreated by his majesty's countenance and bounty, was never in that height, especially that art of arts, divinity; for that we may truly to God's great glory confess, that since the primitive times, there were never so many stars, for so the Scripture calleth them, in that firmament.

These things, Mr. Speaker, I have partly chosen out of your heap, and are so far from being vulgar, as they are in effect singular and proper to his majesty and his times. So that I have made good, as I take it, my first assertion; that the only worthy commender of his majesty is time: which hath so set off his majesty's merits by the shadow of comparison, as it passeth the lustre or commendation of words.

How then shall I conclude? Shall I say, "O fortunatos nimium sua si bona norint?" No, for I see ye are happy in enjoying them, and happy again in knowing them. But I will conclude this part with that saying, turned to the right hand: "Si gratum dixeris, omnia dixeris." Your gratitude contains in a word all that I can say to you touching this parliament.

Touching the third point of your speech, concerning parliaments, I shall need to say little: for there was never that honour done to the institution of parliament, that his majesty did it in his last speech, making it in effect the perfection of monarchy; for that although monarchy was the more ancient, and be independent, yet by the advice and assistance of parliament it is the stronger and the surer built.

And therefore I shall say no more of this point; but as you, Mr. Speaker, did well note, that when the king sits in parliament, and his prelates, peers, and commons attend him, he is in the exaltation of his orb; so I wish things may be so carried, that he may be then in greatest serenity and benignity of aspect; shining upon his people both in glory and grace. Now you know well, that the shining of the sun fair upon the ground, whereby all things exhilarate and do fructify, is either hindered by clouds above or mists below; perhaps by brambles and briers that grow upon the ground itself. All which I hope at this time will be dispelled and removed.

I come now to the last part of your speech, concerning the petitions: but before I deliver his majesty's answer respectively in particular, I am to speak to you some few words in general: wherein, in effect, I shall but glean, his majesty having so excellently and fully expressed himself.

For that, that can be spoken pertinently, must be either touching the subject or matter of parliament business; or of the manner and carriage of the same; or, lastly, of the time, and the husbanding and marshalling of time.

For the matters to be handled in parliament, they are either of church, state, laws, or grievances.

For the first two, concerning church or state, ye have heard the king himself speak; and as the Scripture saith, "Who is he that in such things shall come after the king?" For the other two, I shall say somewhat, but very shortly.

For laws, they are things proper for your own element; and, therefore, therein ye are rather to lead than to be led. Only it is not amiss to put you in mind of two things; the one, that ye do not multiply or accumulate laws more than ye need. There is a wise and learned civilian that applies the curse of the prophet, "Pluet super eos laqueos,"

to multiplicity of laws: for they do but ensnare and entangle the people. I wish rather, that ye should either revive good laws that are fallen and discontinued, or provide against the slack execution of laws which are already in force; or meet with the subtile evasions from laws which time and craft hath undermined, than to make "novas creaturas legum," laws upon a new mould.

The other point, touching laws, is, that ye busy not yourselves too much in private bills, except it be in cases wherein the help and arm of ordinary justice is too short.

For grievances, his majesty hath with great grace and benignity opened himself. Nevertheless, the limitations, which may make up your grievances not to beat the air only, but to sort to a desired effect, are principally two. The one, to use his majesty's term, that ye do not hunt after grievances, such as may seem rather to be stirred here when ye are met, than to have sprung from the desires of the country: ye are to represent the people; ye are not to personate them.

The other, that ye do not heap up grievances, as if numbers should make a show where the weight is small; or, as if all things amiss, like Plato's commonwealth, should be remedied at once. It is certain, that the best governments, yea, and the best men, are like the best precious stones, wherein every flaw or icicle or grain are seen and noted more than in those that are generally foul and corrupted.

Therefore contain yourselves within that moderation as may appear to bend rather to the effectual ease of the people, than to a discursive envy, or scandal upon the state.

As for the manner of carriage of parliament business, ye must know, that ye deal with a king that hath been longer king than any of you have been parliament men; and a king that is no less sensible of forms than of matter; and is as far from enduring diminution of majesty, as from regarding flattery or vainglory; and a king that understandeth as well the pulse of the hearts of the people, as his own orb. And, therefore, both let your grievances have a decent and reverend form and style; and, to use the words of former parliaments, let them be "tanquam gemitus columbæ," without pique or harshness: and, on the other side, in that ye do for the king, let it have a mark of unity, alacrity, and affection; which will be of this force, that whatsoever ye do in substance, will be doubled in reputation abroad, as in a crystal glass.

For the time, if ever parliament was to be measured by the hour-glass, it is this; in regard of the instant occasion flying away irrecoverably. Therefore, let your speeches in the House be the speeches of counsellors, and not of orators; let your committees tend to despatch, not to dispute; and so marshal the times as the public business, especially the proper business of the parliament, be put first, and private bills be put last, as time shall give leave, or within the spaces of the public.

For the four petitions, his majesty is pleased to grant them all as liberally as the ancient and true custom of parliament doth warrant, and with the cautions that have ever gone with them; that is to say, That the privilege be not used for defrauding of creditors, and defeating of ordinary justice: that liberty of speech turn not into license, but be joined with that gravity and discretion, as may taste of duty and love to your sovereign, reverence to your own assembly, and respect to the matters ye handle: that your accesses be at such fit times, as may stand best with his majesty's pleasure and occasions: that mistakings and misunderstandings be rather avoided and prevented, as much as may be, than salved or cleared.

A SPEECH IN PARLIAMENT,

30 OF ELIZABETH,

UPON THE MOTION OF SUBSIDY.

And please you, Mr. Speaker, I must consider the time which is spent; but yet so, as I must consider also the matter, which is great. This great cause was, at the first, so materially and weightily propounded; and after, in such sort persuaded and enforced; and by him that last spake, so much time taken, and yet to good purpose; as I shall speak at a great disadvantage: but, because it hath been always used, and the mixture of this House doth so require it, that in causes of this nature there be some speech and opinion, as well from persons of generality, as by persons of authority, I will say somewhat, and not much: wherein it shall not be fit for me to enter into, or to insist upon secrets, either of her majesty's coffers, or of her council; but my speech must be of a more vulgar nature.

I will not enter, Mr. Speaker, into a laudative

speech of the high and singular benefits, which, by her majesty's most politic and happy government, we receive, thereby to incite you to a retribution; partly, because no breath of man can set them forth worthily; and partly, because, I know, her majesty, in her magnanimity, doth bestow her benefits like her freest patents, "absque aliquo inde reddendo;" not looking for any thing again, if it were in respect only of her particular, but love and loyalty. Neither will I now, at this time, put the case of this realm of England too precisely; how it standeth with the subject in point of payments to the crown: though I could make it appear by demonstration, what opinion soever be conceived, that never subjects were partakers of greater freedom and ease; and that whether you look abroad into other countries at this present time, or look back to former times in this our own country, we shall find an exceeding difference in matter of taxes; which, now, I reserve to mention; not so much in doubt to acquaint your ears with foreign strains, or to dig up the sepulchres of buried and forgotten impositions, which, in this case, as by way of comparison, it is necessary you understand; but because speech in the House is fit to persuade the general point, and, particularly, is more proper and seasonable for the committee: neither will I make any observation upon her majesty's manner of expending and issuing treasure; being not upon excessive and exorbitant donatives, nor upon sumptuous and unnecessary triumphs, buildings, or like magnificence; but upon the preservation, protection, and honour of the realm: for I dare not scan upon her majesty's actions, which it becometh me rather to admire in silence, than to gloss or discourse upon them, though with never so good a meaning. Sure I am, that the treasure that cometh from you to her majesty, is but as a vapour which riseth from the earth, and gathereth into a cloud, and stayeth not there long; but upon the same earth it falleth again: and what if some drops of this do fall upon France or Flanders? It is like a sweet odour of honour and reputation to our nation throughout the world. But I will only insist upon the natural and inviolate law of preservation.

It is a truth, Mr. Speaker, and a familiar truth, that safety and preservation is to be preferred before benefit or increase, inasmuch as those counsels which tend to preservation, seem to be attended with necessity: whereas those deliberations which tend to benefit, seem only accompanied with persuasion. And it is ever gain and no loss, when at the foot of the account there remains the purchase of safety. The prints of this are everywhere to be found: the patient will ever part with some of his blood to save and clear the rest: the seafaring man will, in a storm, cast over some of his goods to save and assure the rest: the husbandman will afford some foot of ground for his hedge and ditch, to fortify and defend the rest. Why, Mr. Speaker, the disputer will, if he be wise and cunning, grant somewhat that seemeth to make against him, because he will keep himself within the strength of his opinion, and the better maintain the rest. But this place advertiseth me not to handle the matter in a commonplace. I will now deliver unto you that, which, upon a "probatum est," hath wrought upon myself, knowing your affections to be like mine own. There hath fallen out, since the last parliament, four accidents or occurrents of state; things published and known to you all; by every one whereof, it seemeth to me, in my vulgar understanding, that the danger of this realm is increased: which I speak not by way of apprehending fear, for I know I speak to English courages; but by way of pressing provision: for I do find, Mr. Speaker, that when kingdoms and states are entered into terms and resolutions of hostility one against the other; yet they are many times restrained from their attempts by four impediments.

The first is by this same "aliud agere;" when they have their hands full of other matters, which they have embraced, and serveth for a diversion of their hostile purposes.

The next is, when they want the commodity or opportunity of some places of near approach.

The third, when they have conceived an apprehension of the difficulty and churlishness of the enterprise, and that it is not prepared to their hand.

And the fourth is, when a state, through the age of the monarch, groweth heavy and indisposed to actions of great peril and motion: and this dull humour is not sharpened nor inflamed by any provocations or scorns. Now if it please you to examine, whether, by removing the impediments, in these four kinds, the danger be not grown so many degrees nearer us by accidents, as I said, fresh, and all dated since the last parliament.

Soon after the last parliament, you may be pleased to remember how the French king revolted from his religion; whereby every man of common understanding may infer, that the quarrel between France and Spain is more reconcileable, and a greater inclination of affairs to a peace, than before: which supposed, it followeth, Spain shall be more free to intend his malice against this realm.

Since the last parliament, it is also notorious in every man's knowledge and remembrance, that the Spaniards have possessed themselves of that avenue and place of approach for England, which was never in the hands of any king of Spain before; and that is Calais; which in true reason and consideration of estate of what value or service it is, I know not; but in common understanding, it is a knocking at our doors.

Since the last parliament also that ulcer of Ire-

land, which indeed brake forth before, hath run on and raged more: which cannot but be a great attractive to the ambition of the council of Spain, who by former experience know of how tough a complexion this realm of England is to be assailed; and, therefore, as rheums and fluxes of humours, is like to resort to that part which is weak and distempered.

And, lastly, it is famous now, and so will be many ages hence, how by these two sea-journeys we have braved him, and objected him to scorn: so that no blood can be so frozen or mortified, but must needs take flames of revenge upon so mighty a disgrace.

So as this concurrence of occurrents, all since our last assembly, some to deliver and free our enemies, some to advance and bring him on his way, some to tempt and allure him, some to spur on and provoke him, cannot but threaten an increase of our peril in great proportion.

Lastly, Mr. Speaker, I will but reduce to the memory of this House one other argument, for ample and large providing and supplying treasure: and this it is:

I see men do with great alacrity and spirit proceed when they have obtained a course they long wished for and were restrained from. Myself can remember, both in this honourable assembly, and in all other places of this realm, how forward and affectionate men were to have an invasive war. Then we would say, a defensive war was like eating and consuming interest, and needs we would be adventurers and assailants: "Habes quod tota mente petisti:" shall we not now make it good? especially when we have tasted so prosperous fruit of our desires.

The first of these expeditions invasive was achieved with great felicity, ravished a strong and famous port in the lap and bosom of their high countries; brought them to such despair as they fired themselves and their Indian fleet in sacrifice, as a good odour and incense unto God for the great and barbarous cruelties which they have committed upon the poor Indians, whither that fleet was sailing; disordered their reckonings so, as the next news we heard of was nothing but protesting of bills and breaking credit.

The second journey was with notable resolution borne up against weather and all difficulties; and besides the success in amusing him and putting him to infinite charge, sure I am it was like a Tartar's or Parthian's bow, which shooteth backward, and had a most strong and violent effect and operation both in France and Flanders; so that our neighbours and confederates have reaped the harvest of it; and while the life-blood of Spain went inward to the heart, the outward limbs and members trembled, and could not resist. And, lastly, we have a perfect account of all the noble and good blood that was carried forth, and of all our sea-walls and good shipping, without mortality of persons, wreck of vessels, or any manner of diminution. And these have been the happy effects of our so long and so much desired invasive war.

To conclude, Mr. Speaker, therefore, I doubt not but every man will consent that our gift must bear these two marks and badges: the one, of the danger of the realm by so great a proportion, since the last parliament, increased; the other, of the satisfaction we receive in having obtained our so earnest and ardent desire of an invasive war

CHARGES.

THE JUDICIAL CHARGE

OF

SIR FRANCIS BACON, KNIGHT,

THE KING'S SOLICITOR,

UPON THE COMMISSION OF OYER AND TERMINER HELD FOR THE

VERGE OF THE COURT.

"Lex vitiorum emendatrix, virtutum commendatrix est."

You are to know, and consider well the duty and service to which you are called, and whereupon you are by your oath charged. It is the happy estate and condition of the subject of this realm of England, that he is not to be impeached in his life, lands, or goods, by flying rumours, or wandering fames and reports, or secret and privy inquisitions; but by the oath and presentment of men of honest condition, in the face of justice. But this happy estate of the subject will turn to hurt and inconvenience, if those that hold that part which you are now to perform shall be negligent and remiss in doing their duty; for as of two evils it were better men's doings were looked into over-strictly and severely, than that there should be a notorious impunity of malefactors; as was well and wisely said of ancient time, "a man were better live where nothing is lawful, than where all things are lawful." This, therefore, rests in your care and conscience, forasmuch as at you justice begins, and the law cannot pursue and chase offenders to their deserved fall, except you first put them up and discover them, whereby they may be brought to answer; for your verdict is not concluding to condemn, but it is necessary to charge, and without it the court cannot proceed to condemn.

Considering, therefore, that ye are the eye of justice, ye ought to be single, without partial affection; watchful, not asleep, or false asleep in winking at offenders, and sharp-sighted to proceed with understanding and discretion: for, in a word, if you shall not present unto the court all such offences, as shall appear unto you either by evidence given in, or otherwise, mark what I say, of your own knowledge, which have been committed within the verge, which is as it were the limits of your survey, but shall smother and conceal any offence willingly, then the guiltiness of others will cleave to your consciences before God; and, besides, you are answerable in some degree to the king and his law for such your default and suppression; and therefore take good regard unto it, you are to serve the king and his people, you are to keep and observe your oath, you are to acquit yourselves.

But there is yet more cause why you should take more special regard to your presentments, than any other grand juries within the counties of this kingdom at large: for as it is a nearer degree and approach unto the king, which is the fountain of justice and government, to be the king's servant, than to be the king's subject; so this commission, ordained for the king's servants and household, ought in the execution of justice to be exemplary unto other places. David said, who was a king, "The wicked man shall not abide in my house;" as taking knowledge that it was impossible for kings to extend their care, to banish wickedness over all their land or empire; but yet at least they ought to undertake to God for their house.

We see further, that the law doth so esteem the dignity of the king's settled mansion-house,

as it hath laid unto it a plot of twelve miles round, which we call the verge, to be subject to a special and exempted jurisdiction depending upon his person and great officers. This is as a half-pace or carpet spread about the king's chair of estate, which, therefore, ought to be cleared and voided more than other places of the kingdom: for if offences should be shrouded under the king's wings, what hope is there of discipline and good justice in more remote parts? We see the sun, when it is at the brightest, there may be perhaps a bank of clouds in the north, or the west, or remote regions, but near his body few or none; for where the king cometh there should come peace and order, and an awe and reverence in men's hearts.

And this jurisdiction was in ancient time executed, and since by statute ratified, by the lord steward, with great ceremony, in the nature of a peculiar king's bench for the verge; for it was thought a kind of eclipsing to the king's honour, that where the king was, any justice should be sought but immediately from his own officers. But in respect that office was oft void, this commission hath succeeded, which change I do not dislike; for though it hath less state, yet it hath more strength legally: therefore, I say, you, that are a jury of the verge, should lead and give a pattern unto others in the care and conscience of your presentments.

Concerning the particular points and articles whereof you shall inquire, I will help your memory and mine own with order: neither will I load you, or trouble myself with every branch of several offences, but stand upon those that are principal and most in use: the offences, therefore, that you are to present are of four natures.

I. The first, such as concern God and his church.

II. The second, such as concern the king and his state.

III. The third, such as concern the king's people, and are capital.

IV. The fourth, such as concern the king's people, not capital.

The service of Almighty God, upon whose blessing the peace, safety, and good estate of king and kingdom doth depend, may be violated, and God dishonoured in three manners, by profanation, by contempt, and by division, or breach of unity.

First, if any man hath depraved or abused in word or deed the blessed sacrament, or disturbed the preacher or congregation in the time of divine service; or if any have maliciously stricken with weapon, or drawn weapon in any church or churchyard; or if any fair or market have been kept in any churchyard, these are profanations within the purview of several statutes, and those you are to present: for holy things, actions, times, and sacred places, are to be preserved in reverence and divine respect.

For contempts of our church and service, they are comprehended in that known name, which too many, if it pleased God, bear, recusancy; which offence hath many branches and dependencies; the wife-recusant, she tempts; the church Papist, he feeds and relieves; the corrupt schoolmaster, he soweth tares; the dissembler, he conformeth and doth not communicate. Therefore, if any person, man or woman, wife or sole, above the age of sixteen years, not having some lawful excuse, have not repaired to church according to the several statutes; the one, for the weekly, the other, for the monthly repair, you are to present both the offence and the time how long. Again, such as maintain, relieve, keep in service of livery recusants, though themselves be none, you are likewise to present; for these be like the roots of nettles, which sting not themselves, but bear and maintain the stinging leaves: so if any that keepeth a schoolmaster that comes not to church, or is not allowed by the bishop, for that infection may spread far; so such recusant as have been convicted and conformed, and have not received the sacrament once a year, for that is the touchstone of their true conversion: and of these offences of recusancy take you special regard. Twelve miles from court is no region for such subjects. In the name of God, why should not twelve miles about the king's chair be as free from Papist-recusants, as twelve from the city of Rome, the pope's chair, is from Protestants? There be hypocrites and atheists, and so I fear there be amongst us; but no open contempt of their religion is endured. If there must be recusants, it were better they lurked in the country, than here in the bosom of the kingdom.

For matter of division and breach of unity, it is not without a mystery that Christ's coat had no seam, nor no more should the church, if it were possible. Therefore, if any minister refuse to use the book of common-prayer, or wilfully swerveth in divine service from that book; or if any person whatsoever do scandalize that book, and speak openly and maliciously in derogation of it; such men do but make a rent in the garment, and such are by you to be inquired of. But much more, such as are not only differing, but in a sort opposite unto it, by using a superstitious and corrupted form of divine service; I mean, such as say or hear mass.

These offences which I have recited to you, are against the service and worship of God: there remain two which likewise pertain to the dishonour of God; the one, is the abuse of his name by perjury; the other, is the adhering to God's declared enemies, evil and outcast spirits, by conjuration and witchcraft.

For perjury, it is hard to say whether it be more odious to God, or pernicious to man; for as

oath, saith the apostle, is the end of controversies: if, therefore, that boundary of suits be taken away or mis-set, where shall be the end? Therefore you are to inquire of wilful and corrupt perjury in any of the king's courts, yea, of court-barons and the like, and that as well of the actors, as of the procurer and suborner.

For witchcraft, by the former law it was not death, except it were actual and gross invocation of evil spirits, or making covenant with them, or taking away life by witchcraft: but now, by an act in his majesty's times, charms and sorceries in certain cases of procuring of unlawful love or bodily hurt, and some others, are made felony the second offence; the first being imprisonment and pillory.

And here I do conclude my first part concerning religion and ecclesiastical causes: wherein it may be thought that I do forget matters of supremacy, or of Jesuits, and seminaries, and the like, which are usually sorted with causes of religion: but I must have leave to direct myself according to mine own persuasion, which is, that, whatsoever hath been said or written on the other side, all the late statutes, which inflict capital punishment upon extollers of the pope's supremacy, deniers of the king's supremacy, Jesuits and seminaries, and other offenders of that nature, have for their principal scope, not the punishment of the error of conscience, but the repressing of the peril of the estate. This is the true spirit of these laws, and therefore I will place them under my second division, which is of offences that concern the king and his estate, to which now I come.

These offences, therefore, respect either the safety of the king's person, or the safety of his estate and kingdom, which, though they cannot be disevered in deed, yet they may be distinguished in speech. First, then, if any have conspired against the life of the king, which God have in his custody! or of the queen's majesty, or of the most noble prince their eldest son; the very compassing and inward imagination thereof is high treason, if it can be proved by any fact that is overt: for in the case of so sudden, dark, and pernicious, and peremptory attempts, it were too late for the law to take a blow before it gives; and this high treason of all other is most heinous, of which you shall inquire, though I hope there be no cause.

There is another capital offence that hath an affinity with this, whereof you here within the verge are most properly to inquire; the king's privy council are as the principal watch over the safety of the king, so as their safety is a portion of his: if, therefore, any of the king's servants within his cheque-roll, for to them only the law extends, have conspired the death of any the king's privy council, this is felony, and thereof you shall inquire.

And since we are now in that branch of the king's person, I will speak also of the king's person by representation, and the treasons which touch the same.

The king's person and authority is represented in three things; in his seals, in his money, and in his principal magistrates: if, therefore, any have counterfeited the king's great seal, privy seal, or seal manual; or counterfeited, clipped, or scaled his moneys, or other money current, this is high treason; so is it to kill certain great officers or judges executing their office.

We will now pass to those treasons which concern the safety of the king's estate, which are of three kinds, answering to three perils which may happen to an estate; these perils are foreign invasion, open rebellion and sedition, and privy practice to alienate and estrange the hearts of the subjects, and to prepare them either to adhere to enemies, or to burst out into tumults and commotions of themselves.

Therefore, if any person have solicited or procured any invasion from foreigners; or if any have combined to raise and stir the people to rebellion within the realm; these are high treasons, tending to the overthrow of the estate of this commonwealth, and to be inquired of.

The third part of practice hath divers branches, but one principal root in these our times, which is the vast and overspreading ambition and usurpation of the see of Rome; for the Pope of Rome is, according to his late challenges and pretences, become a competitor and corrival with the king, for the hearts and obediences of the king's subjects: he stands for it, he sends over his love-tokens and brokers, under colour of conscience, to steal and win away the hearts and allegiances of the people, and to make them as fuel, ready to take fire upon any his commandments.

This is that yoke which this kingdom hath happily cast off, even at such time when the popish religion was nevertheless continued, and that divers states, which are the pope's vassals, do likewise begin to shake off.

If, therefore, any person have maintained and extolled the usurped authority of the Bishop of Rome within the king's dominions, by writing, preaching, or deed, advisedly, directly, and maliciously; or if any person have published or put in use any of the pope's bulls or instruments of absolution; or if any person have withdrawn, and reconciled, any of the king's subjects from their obedience, or been withdrawn and reconciled; or if any subject have refused the second time to take the oath of supremacy lawfully tendered; or if any Jesuit or seminary come and abide within this realm: these are by several statutes made cases of high treason; the law

counting these things as preparatives, and the first wheels and secret motions of seditions and revolts from the king's obedience. Of these you are to inquire, both of the actors and of their abettors, comforters, receivers, maintainers; and concealers, which in some cases are traitors, as well as the principal, in some cases in "præmunire," in some other, in misprision of treason, which I will not stand to distinguish, and in some other, felony; as, namely, that of the receiving and relieving of Jesuits and priests; the bringing in and dispersing of "Agnus Dei's," crosses, pictures, or such trash, is likewise "præmunire:" and so is the denial to take the oath of supremacy the first time.

And because, in the disposition of a state to troubles and perturbations, military men are most tickle and dangerous; therefore, if any of the king's subjects go over to serve in foreign parts, and do not first endure the touch, that is, to take the oath of allegiance; or if he have borne office in any army, and do not enter into bond with sureties as is prescribed, this is made felony; and such as you shall inquire.

Lastly, because the vulgar people are sometimes led with vain and fond prophecies; if any such shall be published, to the end to move stirs or tumults, this is not felony, but punished by a year's imprisonment and loss of goods; and of this also shall you inquire.

You shall likewise understand that the escape of any prisoner committed for treason, is treason; whereof you are likewise to inquire.

Now come I to the third part of my division; that is, those offences which concern the king's people, and are capital; which, nevertheless, the law terms offences against the crown, in respect of the protection that the king hath of his people, and the interest he hath in them and their welfare; for touch them, touch the king. These offences are of three natures: the first concerneth the conservation of their lives; the second, of honour and honesty of their persons and families; and the third, of their substance.

First, for life. I must say unto you in general, that life is grown too cheap in these times; it is set at the price of words, and every petty scorn and disgrace can have no other reparation; nay, so many men's lives are taken away with impunity, that the very life of the law is almost taken away, which is the execution; and, therefore, though we cannot restore the life of those men that are slain, yet I pray let us restore the law to her life, by proceeding with due severity against the offenders; and most especially this plot of ground, which, as I said, is the king's carpet, ought not to be stained with blood, crying in the ears of God and the king. It is true, nevertheless, that the law doth make divers just differences of life taken away; but yet no such differences as the wanton humours and braveries of men have, under a reverend name of honour and reputation, invented.

The highest degree is where such a one is killed unto whom the offender did bear faith and obedience; as the servant to the master, the wife to the husband, the clerk to the prelate: and I shall ever add, for so I conceive of the law, the child to the father or the mother; and this the law terms petty treason.

The second is, Where a man is slain upon forethought malice, which the law terms murder; and it is an offence horrible and odious, and cannot be blanched, nor made fair, but foul.

The third is, Where a man is killed upon a sudden heat or affray, whereunto the law gives some little favour, because a man in fury is not himself, "ira furor brevis;" wrath is a short madness; and the wisdom of law in his majesty's time hath made a subdivision of the stab given, where the party stabbed is out of defence, and had not given the first blow, from other manslaughters.

The fourth degree is, That of killing a man in the party's own defence, or by misadventure which, though they be not felonies, yet, nevertheless, the law doth not suffer them to go unpunished: because it doth discern some sparks of a bloody mind in the one, and of carelessness in the other.

And the fifth is, Where the law doth admit a kind of justification, not by plea, for a man may not, that hath shed blood, affront the law with pleading not guilty; but when the case is found by verdict, being disclosed upon the evidence; as where a man in the king's highway and peace is assailed to be murdered or robbed; or when a man defending his house, which is his castle, against unlawful violence; or when a sheriff, or minister of justice, is resisted in the execution of his office; or when the patient dieth in the chirurgeon's hands, upon cutting or otherwise: for these cases the law doth privilege, because of the necessity, and because of the innocency of the intention.

Thus much for the death of man, of which cases you are to inquire: together with the accessories before and after the fact.

For the second kind, which concerns the honour and chasteness of persons and families; you are to inquire of the ravishment of women, of the taking of women out of the possession of their parents or guardians against their will, or marrying them, or abusing them; of double marriages, where there was not first seven years' absence, and no notice that the party so absent was alive, and other felonies against the honesty of life.

For the third kind, which concerneth men's substance, you shall inquire of burglaries, robberies, cutting of purses, and taking of any thing from the person: and generally other stealths, as

well such as are plain, as those that are disguised, whereof I will by-and-by speak: but, first, I must require you to use diligence in presenting especially those purloinings and embezzlements, which are of plate, vessels, or whatsoever within the king's house. The king's house is an open place; it ought to be kept safe by law, and not by lock, and therefore needeth the more severity.

Now, for coloured and disguised robberies; I will name two or three of them: the purveyor that takes without warrant, is no better than a thief, and it is felony. The servant that hath the keeping of his majesty's goods, and going away with them, though he came to the possession of them lawfully, it is felony. Of these you shall likewise inquire, principals and accessories. The voluntary escape of a felon is also felony.

For the last part, which is of offences concerning the people not capital, they are many: but I will select only such as I think fittest to be remembered unto you, still dividing, to give you the better light. They are of four natures.

1. The first, is matter of force and outrage.
2. The second, matter of fraud and deceit.
3. Public nuisances and grievances.
4. The fourth, breach and inobservance of certain wholesome and politic laws for government.

For the first, you shall inquire of riots and unlawful assemblies; of forcible entries, and detainers with force; and properly of all assaults of striking, drawing weapon or other violence within the king's house, and the precincts thereof: for the king's house, from whence example of peace should flow unto the farthest parts of the kingdom, as the ointment of Aaron's head to the skirts of his garment, ought to be sacred and inviolate from force and brawls, as well in respect of reverence to the place, as in respect of danger of greater tumult, and of ill example to the whole kingdom; and, therefore, in that place, all should be full of peace, order, regard, forbearance, and silence.

Besides open force, there is a kind of force that cometh with an armed hand, but disguised, that is no less hateful and hurtful; and that is abuse and oppression by authority. And, therefore, you shall inquire of all extortions, in officers and ministers; as sheriffs, bailiffs of hundreds, escheators coroners, constables, ordinaries, and others, who, by colour of office, do poll the people.

For frauds and deceits, I do chiefly commend to your care the frauds and deceits in that which is the chief means of all just contract and permutation, which is, weights and measures; wherein, although God hath pronounced that a false weight is an abomination, yet, the abuse is so common, and so general, I mean of weights, and I speak upon knowledge and late examination, that if one were to build a church, he should need but false weights, and not seek them far, of the piles of brass to make the bells, and the weights of lead to make the battlements: and, herein you are to make special inquiry, whether the clerk of the market within the verge, to whom properly it appertains, hath done his duty.

For nuisances and grievances, I will for the present only single out one, that ye present the decays of highways and bridges; for where the majesty of a king's house draws recourse and access, it is both disgraceful to the king, and diseaseful to the people, if the ways nearabouts be not fair and good; wherein it is strange to see the chargeable pavements and causeways, in the avenues and entrances of towns abroad, beyond the seas; whereas London, the second city at the least of Europe, in glory, in greatness, and in wealth, cannot be discerned by the fairness of the ways, though a little, perhaps, by the broadness of them, from a village.

For the last part, because I pass these things over briefly, I will make mention unto you of three laws.

1. The one, concerning the king's pleasure.
2. The second, concerning the people's food.
3. And the third, concerning wares and manufactures.

You shall therefore inquire of the lawful taking partridges and pheasants or fowl, the destruction of the eggs of the wild fowl, the killing of hares or deer, and the selling of venison or hares: for that which is for exercise, and sport, and courtesy, should not be turned to gluttony and sale victual.

You shall also inquire whether bakers, and brewers keep their assize, and whether as well they, as butchers, innholders, and victuallers, do sell that which is wholesome, and at reasonable prices, and whether they do link and combine to raise prices.

Lastly, you shall inquire whether the good statute be observed, whereby a man may have that he thinketh he hath, and not be abused or mis-served in that he buys: I mean that statute that requireth that none use any manual occupation, but such as have been seven years apprentice to it; which law being generally transgressed, makes the people buy, in effect, chaff for corn; for that which is mis-wrought, will mis-wear.

There be many more things inquirable by you, throughout all the former parts, which it were overlong in particular to recite. You may be supplied either our of your own experience, or out of such bills and informations as shall be brought unto you, or upon any question that you shall demand of the court, which will be ready to give you any farther direction, as far as is fit: but these which I have gone through, are the principal points of your charge; which to present, you have taken the name of God to witness: and in the name of God perform it.

AN EXPLANATION

WHAT MANNER OF PERSONS THOSE SHOULD BE, THAT ARE TO EXECUTE THE POWER OR ORDINANCE

OF

THE KING'S PREROGATIVE.

1. That absolute prerogative, according to the king's pleasure, revealed by his laws, may be exercised and executed by any subject, to whom power may be given by the king, in any place of judgment or commission, which the king, by his law, hath ordained: in which the judge subordinate cannot wrong the people, the law laying down a measure by which every judge should govern and execute; against which law, if any judge proceed, he is, by the law, questionable, and punishable for his transgression.

In this nature are all the judges and commissioners of the land, no otherwise than in their courts, in which the king, in person, is supposed to sit, who cannot make that trespass, felony, or treason, which the law hath not made so to be; neither can punish the guilty by other punishment than the laws have appointed.

This prerogative or power, as it is over all the subjects, so, being known by the subjects, they are without excuse if they offend, and suffer no wrong, if they be justly punished; and, by this prerogative, the king governeth all sorts of people according unto known will.

2. The absolute prerogative, which is in kings according to their private will and judgment, cannot be executed by any subject; neither is it possible to give such power by commission; or fit to subject the people to the same; for the king, in that he is the substitute of God immediately, he father of his people, and head of the commonwealth, hath, by participation with God, and with his subjects, a discretion, judgment, and feeling love towards those over whom he reigneth, only proper to himself, or to his place and person; who, seeing he cannot in any others infuse his wisdom, power, or gifts, which God, in respect of his place and charge, hath enabled him withal, can neither subordinate any other judge to govern by that knowledge, which the king can no otherwise, than by his known will, participate unto him: and if any such subordinate judge shall obtain commission, according to the discretion of such judge, to govern the people, that judge is bound to think that to be his soundest discretion, which the law, in which is the king's known will, showeth unto him to be that justice, which he ought to administer; otherwise he might seem to esteem himself above the king's law, who will not govern by it, or to have a power derived from other than from the king, which, in the kingdom will administer justice contrary unto the justice of the land: neither can such a judge or commissioner, under the name of the king's authority, shroud his own high action, seeing the conscience and discretion of every man is particular and private to himself, so as the discretion of the judge cannot be properly, or possibly, the discretion, or the conscience of the king; and, if not his discretion, neither the judgment that is ruled by another man's only.

Therefore it may seem they rather desire to be kings, than to rule the people under the king, which will not administer justice by law, but by their own will.

3. This administration in a subject is derogative to the king's prerogative: for he administereth justice out of a private direction, being not capable of a general direction how to use the king's subjects at pleasure, in causes of particular respect; which, if no other than the king himself can do, how can it be so that any man should desire that which is unfit and impossible, but that it must proceed out of some exorbitant affection? the rather, seeing such places be full of trouble, and altogether unnecessary, no man will seek to thrust himself into them but for hopes of gain. Then is not any prerogative oppugned, but maintained, though it be desired, that every subordinate magistrate may not be made supreme, whereby he may seize upon the hearts of the people, take from the king the respect due unto him only, or judge the people otherwise than the king doth himself.

4. And although the prince be not bound to render any account to the law, which in person he administereth himself, yet every subordinate judge must render an account to the king, by his laws, how he hath administered justice in his place where he is set. But if he hath power to

rule by private direction, for which there is no law, how can he be questioned by a law, if in his private censure he offends?

5. Therefore, it seemeth that, in giving such authority, the king ordaineth not subordinate magistrates, but absolute kings: and what doth the king leave to himself, who giveth so much to others, as he hath himself? Neither is there a greater bond to tie the subject to his prince in particular, than when he shall have recourse unto him, in his person, or in his power, for relief of the wrongs which from private men be offered; or for reformation of the oppressions which any subordinate magistrate shall impose upon the people. There can be no offence in the judge, who hath power to execute according to his discretion, when the discretion of any judge shall be thought fit to be limited, and therefore there can be therein no reformation; whereby the king in this useth no prerogative to gain his subjects' right: then the subject is bound to suffer helpless wrong; and the discontent of the people is cast upon the king; the laws being neglected, which, with their equity, in all other causes and judgments, saving this, interpose themselves and yield remedy.

6. And, to conclude, custom cannot confirm that which is any ways unreasonable of itself.

Wisdom will not allow that which is many ways dangerous, and no ways profitable.

Justice will not approve that government, where it cannot be but wrong must be committed.

Neither can there be any rule by which to try it, nor means of reformation of it.

7. Therefore, whosoever desireth government must seek such as he is capable of, not such as seemeth to himself most easy to execute; for it is apparent, that it is easy to him that knoweth not law nor justice, to rule as he listeth, his will never wanting a power to itself: but it is safe and blameless, both for the judge and people, and honour to the king, that judges be appointed who know the law, and that they be limited to govern according to the law.

THE CHARGE

OF SIR FRANCIS BACON, KNIGHT,

HIS MAJESTY'S ATTORNEY-GENERAL,

TOUCHING DUELS:

UPON AN INFORMATION IN THE STAR CHAMBER AGAINST PRIEST AND WRIGHT;

WITH THE DECREE OF THE STAR CHAMBER IN THE SAME CAUSE.

My Lords,

I thought it fit for my place, and for these times, to bring to hearing before your lordships some cause touching private duels, to see if this court can do any good to tame and reclaim that evil, which seems unbridled. And I could have wished that I had met with some greater persons, as a subject for your censure, both because it had been more worthy of this presence, and also the better to have showed the resolution myself hath to proceed without respect of persons in this business; but finding this cause on foot in my predecessor's time, and published and ready for hearing, I thought to lose no time in a mischief that groweth every day: and, besides, it passes not amiss sometimes in government, that the greater sort be admonished by an example made in the meaner, and the dog to be beaten before the lion. Nay, I should think, my lords, that men of birth and quality will leave the practice when it begins to be vilified, and come so low as to barber-surgeons and butchers, and such base mechanical persons.

And, for the greatness of this presence, in which I take much comfort, both as I consider it in itself, and much more in respect it is by his majesty's direction, I will supply the meanness of the particular cause, by handling of the general point: to the end that, by the occasion of this present cause, both my purpose of prosecution against duels, and the opinion of the court, without which I am nothing, for the censure of them, may appear, and thereby offenders in that kind may read their own case, and know what

they are to expect; which may serve for a warning until example may be made in some greater person: which, I doubt, the times will but too soon afford.

Therefore, before I come to the particular, whereof your lordships are now to judge, I think it time best spent to speak somewhat:

First, Of the nature and greatness of this mischief.

Secondly, Of the causes and remedies.

Thirdly, Of the justice of the law of England, which some stick not to think defective in this matter.

Fourthly, Of the capacity of this court, where certainly the remedy of this mischief is best to be found.

And, fifthly, Touching mine own purpose and resolution, wherein I shall humbly crave your lordships' aid and assistance.

For the mischief itself, it may please your lordships to take into your consideration that when revenge is once extorted out of the magistrates' hands, contrary to God's ordinance, "Mihi vindicta, ego retribuam," and every man shall bear the sword, not to defend, but to assail; and private men begin once to presume to give law to themselves, and to right their own wrongs, no man can foresee the danger and inconveniences that may arise and multiply thereupon. It may cause sudden storms in court, to the disturbance of his majesty, and unsafety of his person: it may grow from quarrels to bandying, and from bandying to trooping, and so to tumult and commotion; from particular persons to dissension of families and alliances; yea, to national quarrels, according to the infinite variety of accidents, which fall not under foresight: so that the state by this means shall be like to a distempered and imperfect body, continually subject to inflammations and convulsions.

Besides, certainly, both in divinity and in policy, offences of presumption are the greatest. Other offences yield and consent to the law that it is good, not daring to make defence, or to justify themselves; but this offence expressly gives the law an affront, as if there were two laws, one a kind of gown-law, and the other a law of reputation, as they term it; so that Paul's and Westminster, the pulpit and the courts of justice, must give place to the law, as the king speaketh in his proclamation, of ordinary tables, and such reverend assemblies: the year-books, and statute-books, must give place to some French and Italian pamphlets, which handle the doctrine of duels, which, if they be in the right, "transeamus ad illa," let us receive them, and not keep the people in conflict and distraction between two laws.

Again, my lords, it is a miserable effect, when young men, full of towardness and hope, such as the poets call "aurorse filii," sons of the morning, in whom the expectation and comfort of their friends consisteth, shall be cast away and destroyed in such a vain manner; but much more it is to be deplored, when so much noble and genteel blood should be spilt upon such follies as, if it were adventured in the field in service of the king and realm, were able to make the fortune of a day, and to change the fortune of a kingdom. So as your lordships see what a desperate evil this is; it troubleth peace, it disfurnisheth war, it bringeth calamity upon private men, peril upon the state, and contempt upon the law.

Touching the causes of it; the first motive, no doubt, is a false and erroneous imagination of honour and credit: and, therefore, the king, in his last proclamation, doth most aptly and excellently call them bewitching duels. For, if one judge of it truly, it is no better than a sorcery that enchanteth the spirits of young men, that bear great minds with a false show, "species falsa;" and a kind of satanical illusion and apparition of honour against religion, against law, against moral virtue, and against the precedents and examples of the best times and valiantest nations; as I shall tell you by-and-by, when I shall show you the law of England is not alone in this point.

But then the seed of this mischief being such, it is nourished by vain discourses, and green and unripe conceits, which, nevertheless, have so prevailed, as, though a man were staid and sober-minded, and a right believer, touching the vanity and unlawfulness of these duels; yet the stream of vulgar opinion is such, as it imposeth a necessity upon men of value to conform themselves, or else there is no living or looking upon men's faces: so that we have not to do, in this case, so much with particular persons, as with unsound and depraved opinions, like the dominations and spirits of the air, which the Scripture speaketh of.

Hereunto may be added, that men have almost lost the true notion and understanding of fortitude and valour. For fortitude distinguisheth of the grounds of quarrels, whether they be just; and not only so, but whether they be worthy; and setteth a better price upon men's lives, than to bestow them idly: nay, it is weakness and disesteem of a man's self, to put a man's life upon such ledger performances: a man's life is not to be trifled away; it is to be offered up and sacrificed to honourable services, public merits, good causes, and noble adventures. It is in expense of blood, as it is in expense of money; it is no liberality to make a profusion of money upon every vain occasion, nor no more is it fortitude to make effusion of blood, except the cause be of worth. And thus much for the causes of this evil.

For the remedies, I hope some great and noble person will put his hand to this plough, and I wish that my labours of this day may be but forerunners to the work of a higher and better hand. But

yet to deliver my opinion as may be proper for this time and place, there be four things that I have thought on, as the most effectual for the repressing of this depraved custom of particular combats.

The first is, that there do appear and be declared a constant and settled resolution in the state to abolish it. For this is a thing, my lords, must go down at once, or not at all; for then every particular man will think himself acquitted in his reputation, when he sees that the state takes it to heart, as an insult against the king's power and authority, and thereupon hath absolutely resolved to master it; like unto that which was set down in express words in the edict of Charles IX. of France, touching duels, that the king himself took upon him the honour of all that took themselves grieved or interested for not having performed the combat. So must the state do in this business: and in my conscience there is none that is but of a reasonable, sober disposition, be he never so valiant, except it be some furious person, that is like a firework, but will be glad of it, when he shall see the law and rule of state disinterest him of a vain and unnecessary hazard.

Secondly, care must be taken that this evil be no more cockered, nor the humour of it fed; wherein I humbly pray your lordships that I may speak my mind freely, and yet be understood aright. The proceedings of the great and noble commissioners martial I honour and reverence much, and of them I speak not in any sort; but I say the compounding of quarrels, which is otherwise in use by private noblemen and gentlemen, it is so punctual, and hath such reference and respect unto the received conceits, what's beforehand, and what's behindhand, and I cannot tell what, as without all question it doth, in a fashion, countenance and authorize this practice of duels, as if it had in it somewhat of right.

Thirdly, I must acknowledge that I learned out of the king's last proclamation, the most prudent and best applied remedy for this offence, if it shall please his majesty to use it, that the wit of man can devise. This offence, my lords, is grounded upon a false conceit of honour, and, therefore, it would be punished in the same kind, "in eo quis rectissime plectitur, in quo peccat." The fountain of honour is the king and his aspect, and the access to his person continueth honour in life, and to be banished from his presence is one of the greatest eclipses of honour that can be; if his majesty shall be pleased that when this court shall censure any of these offences in persons of eminent quality, to add this out of his own power and discipline, that these persons shall be banished and excluded from his court for certain years, and the courts of his queen and prince, I think there is no man that hath any good blood in him will commit an act that shall cast him into that darkness, that he may not behold his sovereign's face.

Lastly, and that which more properly concerneth this court: we see, my lords, the root of this offence is stubborn, for it despiseth death, which is the utmost of punishments; and it were a just but a miserable severity, to execute the law without all remission or mercy, where the case proveth capital. And yet the late severity in France was more, where, by a kind of martial law, established by ordinance of the king and parliament, the party that had slain another was presently had to the gibbet, insomuch as gentlemen of great quality were hanged, their wounds bleeding, lest a natural death should prevent the example of justice. But, my lords, the course which we shall take is of far greater lenity, and yet of no less efficacy; which is to punish, in this court, all the middle acts and proceedings which tend to the duel, which I will enumerate to you anon, and so to hew and vex the root in the branches, which, no doubt, in the end will kill the root, and yet prevent the extremity of law.

Now, for the law of England, I see it excepted to, though ignorantly, in two points;

The one, that it should make no difference between an insidious and foul murder, and the killing of a man upon fair terms, as they now call it.

The other, That the law hath not provided sufficient punishment, and reparations, for contumely of words, as the lie, and the like.

But these are no better than childish novelties against the divine law, and against all laws in effect, and against the examples of all the bravest and most virtuous nations of the world.

For, first, for the law of God, there is never to be found any difference made in homicide, but between homicide voluntary, and involuntary, which we term misadventure. And for the case of misadventure itself, there were cities of refuge; so that the offender was put to his flight, and that flight was subject to accident, whether the revenger of blood should overtake him before he had gotten sanctuary or no. It is true that our law hath made a more subtle distinction between the will inflamed and the will advised; between manslaughter in heat, and murder upon prepensed malice, or cold blood, as the soldiers call it; an indulgence not unfit for a choleric and warlike nation: for it is true, "ira furor brevis;" a man in fury is not himself. This privilege of passion the ancient Roman law restrained, but to a case: that was, if the husband took the adulterer in the manner; to that rage and provocation only it gave way, that a homicide was justifiable. But for a difference to be made in case of killing and destroying man, upon a forethought purpose, between foul and fair, and as it were between single murder and vied murder, it is but a monstrous

child of this latter age, and there is no shadow of it in any law divine or human. Only it is true, I find in the Scripture that Cain enticed his brother into the field and slew him treacherously; but Lamech vaunted of his manhood that he would kill a young man, and if it were to his hurt; so as I see no difference between an insidious murder and a braving or presumptuous murder, but the difference between Cain and Lamech.

As for examples in civil states, all memory doth consent, that Græcia and Rome were the most valiant and generous nations of the world; and, that which is more to be noted, they were free estates, and not under a monarchy; whereby a man would think it a great deal the more reason that particular persons should have righted themselves; and yet they had not this practice of duels, nor any thing that bare show thereof: and sure they would have had it, if there had been any virtue in it. Nay, as he saith, "Fas est et ab hoste doceri." It is memorable, that is reported by a counsellor ambassador of the emperor's, touching the censure of the Turks of these duels: there was a combat of this kind performed by two persons of quality of the Turks, wherein one of them was slain, the other party was convented before the council of bashaws; the manner of the reprehension was in these words: "How durst you undertake to fight one with the other? Are there not Christians enough to kill? Did you not know that whether of you shall be slain, the loss would be the Great Seignior's?" So as we may see that the most warlike nations, whether generous or barbarous, have ever despised this wherein now men glory.

It is true, my lords, that I find combats of two natures authorized, how justly I will not dispute as to the latter of them.

The one, when, upon the approaches of armies in the face one of the other, particular persons have made challenges for trial of valours in the field upon the public quarrel.

This the Romans called "Pugna per provocationem" And this was never, but either between the generals themselves, who are absolute, or between particulars by license of the generals; never upon private authority. So you see David asked leave when he fought with Goliah; and Joab, when the armies were met, gave leave, and said, "Let the young men play before us." And of this kind was that famous example in the wars of Naples, between twelve Spaniards and twelve Italians, where the Italians bare away the victory; besides other infinite like examples worthy and laudable, sometimes by singles, sometimes by numbers.

The second combat is a judicial trial of right, where the right is obscure, introduced by the Goths and the northern nations, but more anciently entertained in Spain; and this yet remains in some cases as a divine lot of battle, though controverted by divines, touching the lawfulness of it: so that a wise writer saith, "Taliter pugnantes videntur tentare Deum, quia hoc volunt ut Deus ostendat et faciat miraculum, ut justam causam habens victor efficiatur, quod sæpe contra accidit." But howsoever it be, this kind of fight taketh its warrant from law. Nay, the French themselves, whence this folly seemeth chiefly to have flown, never had it but only in practice and toleration, and never as authorized by law; and yet now of late they have been fain to purge their folly with extreme rigour, insomuch as many gentlemen left between death and life in the duels, as I spake before, were hastened to hanging with their wounds bleeding. For the state found it had been neglected so long, as nothing could be thought cruelty which tended to the putting of it down.

As for the second defect pretended in our law, that it hath provided no remedy for lies and fillips, it may receive like answer. It would have been thought a madness amongst the ancient lawgivers, to have set a punishment upon the lie given, which in effect is but a word of denial, a negative of another's saying. Any lawgiver, if he had been asked the question, would have made Solon's answer: that he had not ordained any punishment for it, because he never imagined the world would have been so fantastical as to take it so highly. The civilians, they dispute whether an action of injury lie for it, and rather resolve the contrary. And Francis the First of France, who first set on and stamped this disgrace so deep, is taxed by the judgment of all wise writers for beginning the vanity of it; for it was he, that when he had himself given the lie and defy to the emperor, to make it current in the world, said in a solemn assembly, "That he was no honest man that would bear the lie:" which was the fountain of this new learning.

As for words of reproach and contumely, whereof the lie was esteemed none, it is not credible, but that the orations themselves are extant, what extreme and exquisite reproaches were tossed up and down in the senate of Rome and the places of assembly, and the like in Græcia, and yet no man took himself fouled by them, but took them but for breath, and the style of an enemy, and either despised them or returned them, but no blood spilt about them.

So of every touch or light blow of the person, they are not in themselves considerable, save that they have got upon them the stamp of a disgrace, which maketh these light things pass for great matter. The law of England, and all laws, hold these degrees of injury to the person, slander, battery, maim, and death; and if there be extraordinary circumstances of despite and contumely, as in case of libels, and bastinadoes, and the like, this court taketh them in hand, and punisheth them exemplarily. But for this apprehension of

a disgrace, that a fillip to the person should be a mortal wound to the reputation, it were good that men did hearken unto the saying of Consalvo, the great and famous commander, that was wont to say, a gentleman's honour should be "de tela crassiore," of a good strong warp or web, that every little thing should not catch in it; when as now it seems they are but of cobweb lawn, or such light stuff, which certainly is weakness, and not true greatness of mind, but like a sick man's body, that is so tender that it feels every thing. And so much in maintenance and demonstration of the wisdom and justice of the law of the land.

For the capacity of this court, I take this to be a ground infallible: that wheresoever an offence is capital, or matter of felony, though it be not acted, there the combination or practice tending to that offence is punishable in this court as a high misdemeanor. So practice to empoison, though it took no effect; waylaying to murder, though it took no effect, and the like; have been adjudged heinous misdemeanors, punishable in this court. Nay, inceptions and preparations in inferior crimes, that are not capital, as suborning and preparing of witnesses that were never deposed, or deposed nothing material, have likewise been censured in this court, as appeareth by the decree in Garnon's case.

Why, then, the major proposition being such, the minor cannot be denied; for every appointment of the field is but combination and plotting of murder; let them gild it how they list, they shall never have fairer terms of me in place of justice. Then the conclusion followeth, that it is a case fit for the censure of the court. And of this there be precedents in the very point of challenge.

It was the case of Wharton, plaintiff, against Ellekar and Acklam, defendants, where Acklam being a follower of Ellekar's, was censured for carrying a challenge from Ellekar to Wharton, though the challenge was not put in writing, but delivered only by word of message; and there are words in the decree, that such challenges are to the subversion of government.

These things are well known, and therefore I needed not so much to have insisted upon them, but that in this case I would be thought not to innovate any thing of my own head, but to follow the former precedents of the court, though I mean to do it more thoroughly, because the time requires it more.

Therefore, now to come to that which concerneth my part; I say that, by the favour of the king and the court, I will prosecute in this court in the cases following.

If any man shall appoint the field, though the fight be not acted or performed.

If any man shall send any challenge in writing, or any message of challenge.

If any man carry or deliver any writing or message of challenge.

If any man shall accept or return a challenge.

If any man shall accept to be a second in a challenge of either side.

If any man shall depart the realm, with intention and agreement to perform the fight beyond the seas.

If any man shall revive a quarrel by any scandalous bruits or writings, contrary to a former proclamation published by his majesty in that behalf.

Nay, I hear there be some counsel learned of duels, that tell young men when they are beforehand, and when they are otherwise, and thereby incense and incite them to the duel, and make an art of it; I hope I shall meet with some of them too: and I am sure, my lords, that this course of preventing duels in nipping them in the bud, is fuller of clemency and providence than the suffering them to go on, and hanging men with their wounds bleeding, as they did in France.

To conclude, I have some petitions to make, first to your lordship, my lord chancellor, that in case I be advertised of a purpose in any to go beyond the sea to fight, I may have granted his majesty's writ of "Ne exeat regnum" to stop him; for this giant bestrideth the sea, and I would take and snare him by the foot on this side; for the combination and plotting is on this side, though it should be acted beyond sea. And your lordship said notably the last time I made a motion in this business, that a man may be as well "fur de se," as "felo de se," if he steal out of the realm for a bad purpose; as for the satisfying of the words of the writ, no man will doubt but he doth "machinari contra coronam," as the words of the writ be, that seeketh to murder a subject; for that is ever "contra coronam et dignitatem." I have also a suit to your lordships all in general, that for justice's sake, and for true honour's sake, honour of religion, law, and the king our master, against this fond and false disguise or puppetry of honour, I may, in my prosecution, which, it is like enough, may sometimes stir coals, which I esteem not for my particular, but as it may hinder the good service, I may, I say, be countenanced and assisted from your lordships. Lastly, I have a petition to the nobles and gentlemen of England, that they would learn to esteem themselves at a just price. "Non hos quæsitum munus in usus," their blood is not to be spilt like water or a vile thing; therefore, that they would rest persuaded there cannot be a form of honour, except it be upon a worthy matter. But for this, "ipsi viderint," I am resolved. And thus much for the general, now to the present case.

THE

DECREE OF THE STAR-CHAMBER

AGAINST

DUELS.

IN CAMERA STELLATA CORAM CONCILIO IBIDEM, 26 JANUARII, 11 JAC. REGIS.

PRESENT,

George Lord Archbishop of Canterbury.
Thomas Lord Ellesmere, Lord Chancellor of England.
Henry Earl of Northampton, Lord Privy Seal.
Charles Earl of Nottingham, Lord High Admiral of England.
Thomas E. of Suffolk, Lord Chamberlain.
John Lord Bishop of London.
Edward Lord Zouch.
William Lord Knolles, Treasurer of the Household.
Edward Lord Wotton, Comptroller.
John Lord Stanhope, Vice-chamberlain.
Sir Edward Coke, Knight, Lord Chief Justice of England.
Sir Henry Hobart, Knight, Lord Chief Justice of the Common Pleas.
Sir Julius Cæsar, Knight, Chancellor of the Exchequer.

This day was heard and debated at large the several matters of informations here exhibited by Sir Francis Bacon, knight, his majesty's attorney-general, the one against William Priest, gentleman, for writing and sending a letter of challenge, together with a stick, which should be the length of the weapon: and the other against Richard Wright, esquire, for carrying and delivering the said letter and stick unto the party challenged, and for other contemptuous and insolent behaviour used before the justices of the peace in Surry at their sessions, before whom he was convented. Upon the opening of which cause, his highness's said attorney-general did first give his reason to the court, why, in a case which he intended should be a leading case for the repressing of so great a mischief in the commonwealth, and concerning an offence which reigneth chiefly amongst persons of honour and quality, he should begin with a cause which had passed between so mean persons as the defendants seemed to be; which he said was done, because he found this cause ready published; and in so growing an evil, he thought good to lose no time; whereunto he added, that it was not amiss sometimes to beat the dog before the lion; saying farther, that he thought it would be some motive for persons of high birth and countenance to leave it, when they saw it was taken up by base and mechanical fellows; but concluded, that he resolved to proceed without respect of persons for the time to come, and for the present to supply the meanness of this particular case by insisting the longer upon the general point.

Wherein he did first express unto the court at large, the greatness and dangerous consequence of this presumptuous offence, which extorted revenge out of the magistrate's hands, and gave boldness to private men to be lawgivers to themselves; the rather because it is an offence that doth justify itself against the law, and plainly gives the law an affront; describing also the miserable effect which it draweth upon private families, by cutting off young men, otherwise of good hope; and chiefly the loss of the king and the commonwealth, by the casting away of much good blood, which, being spent in the field upon occasion of service, were able to continue the renown which this kingdom hath obtained in all ages, of being esteemed victorious.

Secondly, his majesty's said attorney-general did discourse touching the causes and remedies of this mischief, that prevailed so in these times; showing the ground thereof to be a false and erroneous imagination of honour and credit, according to the term which was given to those duels by a former proclamation of his majesty's, which called them bewitching duels, for that it was no better than a kind of sorcery, which enchanteth the spirits of young men, which been great minds, with a show of honour in that which is no honour indeed; being against religion, law, moral virtue, and against the precedents and examples of the best times, and valiantest nations of the world; which, though they excelled for prowess and military virtue in a public quarrel, yet know not what these private duels meant; saying, farther, that there was too much way and countenance given unto these duels, by the course that is held by noblemen and gentlemen in compounding of quarrels, who use to stand too punctually upon conceits of satisfactions and distinctions, what is heforehand, and what is behindhand, which do but feed the humour: adding, likewise, that it was no fortitude to show valour in a quarrel, except there were a just and worthy ground of the quarrel; but, that it was weakness

to set a man's life at so mean a rate as to bestow it upon trifling occasions, which ought to be rather offered up and sacrificed to honourable services, public merits, good causes, and noble adventures. And, as concerning the remedies, he concluded, that the only way was, that the state would declare a constant and settled resolution to master, and put down this presumption in private men, of whatsoever degree, of righting their own wrongs, and this to do at once; for, that then every particular man would think himself acquitted in his reputation, when that he shall see that the state takes his honour into their own hands, and standeth between him and any interest or prejudice, which he might receive in his reputation for obeying: whereunto he added, likewise, that the wisest and mildest way to suppress these duels, was rather to punish in this court all the acts of preparation, which did in any wise tend to the duels, as this of challenges, and the like, and so to prevent the capital punishment, and to vex the root in the branches, than to suffer them to run on to the execution, and then to punish them capitally, after the manner of France: where, of late times, gentlemen of great quality that had killed others in duel, were carried to the gibbet with their wounds bleeding, lest a natural death should keep them from the example of justice.

Thirdly, His majesty's said attorney-general did, by many reasons which he brought and alleged, free the law of England from certain vain and childish exceptions, which are taken by these duellists: the one, because the law makes no difference in punishment between an insidious and foul murder, and the killing a man upon challenge and fair terms, as they call it. The other, for that the law hath not provided sufficient punishment and reparation for contumely of words, as the lie, and the like: wherein his majesty's said attorney-general did show, by many weighty arguments and examples, that the law of England did consent with the law of God and the law of nations in both these points, and that this distinction in murder between foul and fair, and this grounding of mortal quarrels upon uncivil and reproachful words, or the like disgraces, was never authorized by any law or ancient examples; but it is a late vanity, crept in from the practice of the French, who themselves since have been so weary of it, as they have been forced to put it down with all severity.

Fourthly, His majesty's said attorney-general did prove unto the court, by rules of law and precedents, that this court hath capacity to punish sending and accepting of challenges, though they were never acted nor executed; taking for a ground infallible, that wheresoever an offence is capital or matter of felony, if it be acted and performed, there the conspiracy, combination, or practice tending to the same offence, is punishable as a high misdemeanor, although they never were performed. And, therefore, that practice to empoison, though it took no effect, and the like. have been punished in this court; and cited the precedent in Garnon's case, wherein a crime of a much inferior nature, the suborning and preparing of witnesses, though they never were deposed, or deposed nothing material, was censured in this court: whereupon he concluded, that forasmuch as every appointment of the field is in law but a combination of plotting of a murder, howsoever men might gild it; that, therefore, it was a case fit for the censure of this court; and therein he vouched a precedent in the very point, that in a case between Wharton, plaintiff, and Ellekar and Acklam, defendants; Acklam, being a follower of Ellekar, had carried a challenge unto Wharton; and although it were by word of mouth, and not by writing, yet it was severely censured by the court; the decree having words that such challenges do tend to the subversion of government. And, therefore, his majesty's attorney willed the standers by to take notice that it was no innovation that he brought in, but a proceeding according to former precedents of the court, although he purposed to follow it more thoroughly than had been done ever heretofore, because the times did more and more require it. Lastly, his majesty's said attorney-general did declare and publish to the court in several articles, his purpose and resolution in what cases he did intend to prosecute offences of that nature in this court; that is to say, that if any man shall appoint the field, although the fight be not acted or performed; if any man shall send any challenge in writing, or message of challenge; if any man shall carry or deliver any writing or message of challenge; if any man shall accept or return a challenge; if any man shall accept to be a second in a challenge of either part; if any man shall depart the realm, with intention and agreement to perform the fight beyond the seas; if any man shall revive a quarrel by any scandalous bruits or writings, contrary to a former proclamation, published by his majesty in that behalf; that in all these cases his majesty's attorney-general, in discharge of his duty, by the favour and assistance of his majesty and the court, would bring the offenders, of what state or degree soever, to the justice of this court, leaving the lords commissioners martial to the more exact remedies: adding farther, that he heard there were certain counsel learned of duels, that tell young men when they are beforehand, and when they are otherwise, and did incense and incite them to the duel, and made an art of it; who likewise should not be forgotten. And so concluded with two petitions, the one in particular to the lord chancellor, that in case advertisement were given of a purpose in any to go beyond the seas to fight, there might be granted his majesty's

writ of "Ne exeat regnum" against him; and the other to the lords in general, that he might be assisted and countenanced in this service.

After which opening and declaration of the general cause, his majesty's said attorney did proceed to set forth the proofs of this particular challenge and offence now in hand, and brought to the judgment and censure of this honourable court; whereupon it appeared to this honourable court, by the confession of the said defendant, Priest himself, that he having received some wrong and disgrace at the hands of one Hutchest, did thereupon, in revenge thereof, write a letter to the said Hutchest, containing a challenge to fight with him at single rapier, which letter the said Priest did deliver to the said defendant, Wright, together with a stick containing the length of the rapier, wherewith the said Priest meant to perform the fight. Whereupon the said Wright did deliver the said letter to the said Hutchest, and did read the same unto him; and after the reading thereof, did also deliver to the said Hutchest the said stick, saying, that the same was the length of the weapon mentioned in the said letter. But the said Hutchest, dutifully respecting the preservation of his majesty's peace, did refuse the said challenge, whereby no farther mischief did ensue thereupon.

This honourable court, and all the honourable presence this day sitting, upon grave and mature deliberation, pondering the quality of these offences, they generally approved the speech and observations of his majesty's said attorney-general, and highly commended his great care and good service in bringing a cause of this nature to public punishment and example, and in professing a constant purpose to go on in the like course with others: letting him know, that he might expect from the court all concurrence and assistance in so good a work. And thereupon the court did by their several opinions and sentences declare how much it imported the peace and prosperous estate of his majesty and his kingdom, to nip this practice and offence of duels in the head, which now did overspread and grow universal, even among mean persons, and was not only entertained in practice and custom, but was framed into a kind of art and precepts: so that, according to the saying of the Scripture, "mischief is imagined like a law." And the court with one consent did declare their opinions: that, by the ancient law of the land, all inceptions, preparations, and combinations to execute unlawful acts, though they never be performed, as they be not to be punished capitally, except it be in the case of treason, and some other particular cases of statute law; so yet they are punishable as misdemeanors and contempts: and that this court was proper for offences of such a nature; especially in this case, where the bravery and insolency of the times are such as the ordinary magistrates and justices that are trusted with the preservation of the peace, are not able to master and repress those offences, which were by the court at large set forth, to be not only against the law of God, to whom, and his substitutes, all revenge belongeth, as part of his prerogative, but also against the oath and duty of every subject unto his majesty, for that the subject doth swear unto him by the ancient law allegiance of life and member; whereby it is plain inferred, that the subject hath no disposing power over himself of life and member to be spent or ventured according to his own passions and fancies, insomuch as the very practice of chivalry in justs and tournays, which are but images of martial actions, appear by ancient precedents not to be lawful without the king's license obtained. The court also noted, that these private duels or combats were of another nature from the combats which have been allowed by the law, as well of this land as of other nations, for the trial of rights or appeals. For that those combats receive direction and authority from the law; whereas these, contrariwise, spring only from the unbridled humours of private men. And as for the pretence of honour, the court much misliking the confusion of degrees which is grown of late, every man assuming unto himself the term and attribute of honour, did utterly reject and condemn the opinion that the private duel, in any person whatsoever, had any grounds of honour; as well because nothing can be honourable that is not lawful, and that it is no magnanimity or greatness of mind, but a swelling and tumour of the mind, where there faileth a right and sound judgment; as also for that it was rather justly to be esteemed a weakness, and a conscience of small value in a man's self to be dejected so with a word or trifling disgrace, as to think there is no recure of it, but by the hazard of life: whereas true honour, in persons that know their own worth, is not of any such brittle substance, but of a more strong composition. And, finally, the court, showing a firm and settled resolution to proceed with all severity against these duels, and gave warning to all young noblemen gentlemen, that they should not expect the like connivance or toleration as formerly have been, but that justice should have a full passage, without protection or interruption. Adding, that after a strait inhibition, whosoever should attempt a challenge or combat, in case where the other party was restrained to answer him, as now all good subjects are, did by their own principals receive the dishonour and disgrace upon himself.

And for the present cause, the court hath ordered, adjudged, and decreed, that the said William Priest and Richard Wright be committed to the prison of the fleet, and the said Priest to pay five hundred pounds, and the said Wright five hundred marks, for their several fines to his majesty's use. And to the end, that some more public example

may be made hereof amongst his majesty's people, the court hath further ordered and decreed, that the said Priest and Wright shall, at the next assizes, to be holden in the county of Surry, publicly, in face of the court, the judges sitting, acknowledge their high contempt and offence against God, his majesty, and his laws, and show themselves penitent for the same.

Moreover, the wisdom of this high and honourable court thought it meet and necessary that all sorts of his majesty's subjects should understand and take notice of that which hath been said and handled this day touching this matter, as well by his highness's attorney-general, as by the lords judges, touching the law in such cases. And, therefore, the court hath enjoined Mr. Attorney to have special care to the penning of this decree, for the setting forth in the same summarily the matters and reasons which have been opened and delivered by the court touching the same; and, nevertheless, also at some time convenient to publish the particulars of his speech and declaration, as very meet and worthy to be remembered and made known unto the world, as these times are. And this decree, being in such sort carefully drawn and penned, the whole court thought it meet, and so have ordered and decreed, that the same be not only read and published at the next assizes for Surry, at such time as the said Priest and Wright are to acknowledge their offences as aforesaid; but that the same be likewise published and made known in all shires of this kingdom. And to that end the justices of assizes are required by this honourable court to cause this decree to be solemnly read and published in all the places and sittings of their several circuits, and in the greatest assembly; to the end, that all his majesty's subjects may take knowledge and understand the opinion of this honourable court in this case, and in what measure his majesty and this honourable court purposeth to punish such as shall fall into the like contempt and offences hereafter. Lastly, this honourable court much approving that, which the right honourable Sir Edward Coke, knight, Lord Chief Justice of England, did now deliver touching the law in this case of duels, hath enjoined his lordship to report the same in print, as he hath formerly done divers other cases, that such as understand not the law in that behalf, and all others, may better direct themselves, and prevent the danger thereof hereafter.

THE CHARGE GIVEN

BY SIR FRANCIS BACON, KNIGHT,

HIS MAJESTY'S ATTORNEY-GENERAL,

AGAINST

MR. OLIVER SAINT JOHN,

FOR SCANDALIZING AND TRADUCING IN THE PUBLIC SESSIONS, LETTERS SENT FROM THE LORDS OF THE COUNCIL, TOUCHING THE BENEVOLENCE.

My Lords,

I shall inform you "ore tenus," against this gentleman, Mr. I. S.; a gentleman, as it seems, of an ancient house and name; but, for the present, I can think of him by no other name, than the name of a great offender. The nature and quality of his offence, in sum, is this: This gentleman hath, upon advice, not suddenly by his pen, nor by the slip of his tongue; not privately, or in a corner, but publicly, as it were, to the face of the king's ministers and justices, slandered and traduced the king our sovereign, the law of the land, the parliament, and infinite particulars of his majesty's worthy and loving subjects. Nay, the slander is of that nature, that it may seem to interest the people in grief and discontent against the state; whence might have ensued matter of murmur and sedition. So that it is not a simple slander, but a seditious slander, like to that the poet speaketh of—"Calamosque armare veneno." A venomous dart, that hath both iron and poison.

To open to your lordships the true state of this

offence, I will set before you, first, the occasion whereupon Mr. I. S. wrought: then the offence itself, in his own words: and, lastly, the points of his charge.

My lords, you may remember that there was the last parliament an expectation to have had the king supplied with treasure, although the event failed. Herein it is not fit for me to give opinion of a House of Parliament, but I will give testimony of truth in all places. I served in the Lower House, and I observed somewhat. This I do affirm, that I never could perceive but that there was in that House a general disposition to give, and to give largely. The clocks in the House perchance might differ; some went too fast, some went too slow; but the disposition to give was general: so I think I may truly say, "solo tempore lapsus amor."

This accident happening thus beside expectation, it stirred up and awaked in divers of his majesty's worthy servants and subjects of the clergy, the nobility, the court, and others here near at hand, an affection loving and cheerful, to present the king, some with plate, some with money, as free-will offerings, a thing that God Almighty loves, a cheerful giver: what an evil eye doth I know not. And, my lords, let me speak it plainly unto you: God forbid anybody should be so wretched as to think that the obligation of love and duty, from the subject to the king, should be joint and not several. No, my lords, it is both. The subject petitioneth to the king in parliament. He petitioneth likewise out of parliament. The king on the other side gives graces to the subject in parliament: he gives them likewise, and poureth them upon his people out of parliament; and so, no doubt, the subject may give to the king in parliament, and out of parliament. It is true the parliament is "intercursus magnus," the great intercourse and main current of graces and donatives from the king to the people, from the people to the king: but parliaments are held but at certain times; whereas the passages are always open for particulars; even as you see great rivers have their tides, but particular springs and fountains run continually.

To proceed, therefore: As the occasion, which was the failing of supply by parliament, did awake the love and benevolence of those that were at hand to give; so it was apprehended and thought fit by my lords of the council to make a proof, whether the occasion and example both would not awake those in the country of the better sort to follow. Whereupon, their lordships devised and directed letters unto the sheriffs and justices, which declared what was done here above, and wished that the country might be moved, especially men of value.

Now, my lords, I beseech you give me favour and attention to set forth and observe unto you five points: I will number them, because other men may note them; and I will but touch them, because they shall not be drowned or lost in discourse, which I hold worthy the observation, for the honour of the state and confusion of slanderers; whereby it will appear most evidently what care was taken, that that which was then done might not have the effect, no, nor the show, no, nor so much as the shadow of a tax; and that it was so far from breeding or bringing in any ill precedent or example, as, contrariwise, it is a corrective that doth correct and allay the harshness and danger of former examples.

The first is, that what was done was done immediately after such a parliament, as made general profession to give, and was interrupted by accident: so as you may truly and justly esteem it, "tanquam posthuma proles parliamenti," as an after-child of the parliament, and in pursuit, in some small measure, of the firm intent of a parliament past. You may take it also, if you will, as an advance or provisional help until a future parliament; or as a gratification simply, without any relation to a parliament; you can no ways take it amiss.

The second is, that it wrought upon example, as a thing not devised or projected, or required; no, nor so much as recommended, until many that were never moved nor dealt with, "ex mero motu," had freely and frankly sent in their presents. So that the letters were rather like letters of news, what was done at London, than otherwise: and we know "exempla ducunt, non trahunt:" examples they do but lead, they do not draw nor drive.

The third is, that it was not done by commission under the great seal; a thing warranted by a multitude of precedents, both ancient, and of late time, as you shall hear anon, and no doubt warranted by law: so that the commissions be of that style and tenor, as that they be to move and not to levy: but this was done by letters of the council, and no higher hand or form.

The fourth is, that these letters had no manner of show of any binding act of state: for they contain not any special frame or direction how the business should be managed; but were written as upon trust, leaving the matter wholly to the industry and confidence of those in the country; so that it was an "absque computo;" such a form of letters as no man could fitly be called to account upon.

The fifth and last point is, that the whole carriage of the business had no circumstance compulsory. There was no proportion or rate set down, not so much as by way of a wish; there was no menace of any that should deny; no reproof of any that did deny; no certifying of the names of any that had denied. Indeed, if men could not content themselves to deny, but that

they must censure and inveigh, not to excuse themselves, but they must accuse the state, that is another case. But I say, for denying, no man was apprehended, no, nor noted. So that I verily think, that there is none so subtle a disputer in the controversy of "liberum arbitrium," that can with all his distinctions fasten or carp upon the act, but that there was free-will in it.

I conclude, therefore, my lords, that this was a true and pure benevolence; not an imposition called a benevolence; which the statute speaks of; as you shall hear by one of my fellows. There is a great difference, I tell you, though Pilate would not see it, between "Rex Judæorum" and "se dicens Regem Judæorum." And there is a great difference between a benevolence and an exaction called a benevolence, which the Duke of Buckingham speaks of in his oration to the city; and defineth it to be not what the subject of his good-will would give, but what the king of his good-will would take. But this, I say, was a benevolence wherein every man had a prince's prerogative, a negative voice; and this word, "excuse moy," was a plea peremptory. And, therefore, I do wonder how Mr. I. S. could foul or trouble so clear a fountain; certainly it was but his own bitterness and unsound humours.

Now to the particular charge: Amongst other countries, these letters of the lords came to the justices of D—shire, who signified the contents thereof, and gave directions and appointments for meetings concerning the business, to several towns and places within that county: and amongst the rest, notice was given unto the town of A. The Mayor of A. conceiving that this Mr. I. S. being a principal person, and a dweller in that town, was a man likely to give both money and good example, dealt with him to know his mind: he intending, as it seems, to play prizes, would give no answer to the mayor in private, but would take time. The next day then being an appointment of the justices to meet, he takes occasion, or pretends occasion to be absent, because he would bring his papers upon the stage: and thereupon takes pen in hand, and, instead of excusing himself, sits down and contriveth a seditious and libellous accusation against the king and state, which your lordships shall now hear, and sends it to the mayor: and, withal, because the feather of his quill might fly abroad, he gives authority to the mayor to impart it to the justices, if he so thought good. And now, my lords, because I will not mistake or misrepeat, you shall hear the seditious libel in the proper terms and words thereof.

(Here the papers were read.)

My lords, I know this paper offends your ears much, and the ears of any good subject; and sorry I am that the times should produce offences of this nature: but since they do, I would be more sorry they should be passed without severe punishment: "Non tradite factum," as the verse says, altered a little, "aut si traditis, facti quoque tradite pœnam." If any man have a mind to discourse of the fact, let him likewise discourse of the punishment of the fact.

In this writing, my lords, there appears a monster with four heads, of the progeny of him that is the father of lies, and takes his name from slander.

The first is a wicked and seditious slander; or, if I shall use the Scripture phrase, a blaspheming of the king himself; setting him forth for a prince perjured in the great and solemn oath of his coronation, which is as it were the knot of the diadem; a prince that should be a violator and infringer of the liberties, laws, and customs of the kingdom; a mark for a Henry the Fourth; a match for a Richard the Second.

The second is a slander and falsification, and wresting of the law of the land gross and palpable: it is truly said by a civilian, "Tortura legum pessima," the torture of laws is worse than the torture of men.

The third is a slander and false charge of the parliament, that they had denied to give to the king; a point of notorious untruth.

And the last is a slander and a taunting of an infinite number of the king's loving subjects, that have given towards this benevolence and free contribution; charging them as accessary and coadjutors to the king's perjury. Nay, you leave us not there, but you take upon you a pontifical habit, and couple your slander with a curse; but, thanks be to God, we have learned sufficiently out of the Scripture, that "as the bird flies away, so the causeless curse shall not come."

For the first of these, which concerns the king, I have taken to myself the opening and aggravation thereof; the other three I have distributed to my fellows.

My lords, I cannot but enter into this part with some wonder and astonishment, how it should come into the heart of a subject of England to vapour forth such a wicked and venomous slander against the king, whose goodness and grace is comparable, if not incomparable, unto any of the kings his progenitors. This, therefore, gives me a just and necessary occasion to do two things: The one, to make some representation of his majesty; such as truly he is found to be in his government, which Mr. I. S. chargeth with violation of laws and liberties: The other, to search and open the depth of Mr. I. S. his offence. Both which I will do briefly; because the one, I cannot express sufficiently; and the other, I will not press too far.

My lords, I mean to make no panegyric or laudative; the king delights not in it, neither am I fit for it: but if it were but a counsellor or nobleman, whose name had suffered, and were to

receive some kind of reparation in this high court, I would do him that duty as not to pass his merits and just attributes, especially such as are limited with the present case, in silence: for it is fit to burn incense where evil odours have been cast and raised. Is it so that King James shall be said to be a violator of the liberties, laws, and customs of his kingdoms? Or is he not rather a noble and constant protector and conservator of them all? I conceive this consisteth in maintaining religion and the true church; in maintaining the laws of the kingdom, which is the subject's birthright: in temperate use of the prerogative; in due and free administration of justice, and conversation of the peace of the land.

For religion, we must ever acknowledge, in the first place, that we have a king that is the principal conservator of true religion through the Christian world. He hath maintained it not only with sceptre and sword, but likewise by his pen; wherein also he is potent.

He hath awaked and re-authorized the whole party of the reformed religion throughout Europe; which, through the insolency and divers artifices and enchantments of the adverse part, was grown a little dull and dejected: He hath summoned the fraternity of kings to enfranchise themselves from the usurpation of the see of Rome: He hath made himself a mark of contradiction for it.

Neither can I omit, when I speak of religion, to remember that excellent act of his majesty, which, though it were done in a foreign country, yet the church of God is one, and the contagion of these things will soon pass seas and lands: I mean, in his constant and holy proceeding against the heretic Vorstius, whom, being ready to enter into the chair, and there to have authorized one of the most pestilent and heathenish heresies that ever was begun, his majesty by his constant opposition dismounted and pulled down. And I am persuaded there sits in this court one whom God doth the rather bless for being his majesty's instrument in that service.

I cannot remember religion and the church, but I must think of the seed-plots of the same, which are the universities. His majesty, as, for learning amongst kings, he is incomparable in his person; so likewise hath he been in his government a benign or benevolent planet towards learning: by whose influence those nurseries and gardens of learning, the universities, were never more in flower nor fruit.

For the maintaining of the laws, which is the hedge and fence about the liberty of the subject, I may truly affirm it was never in better repair. He doth concur with the votes of the nobles: "Nolumus leges Angliæ mutare." He is an enemy of innovation. Neither doth the universality of his own knowledge carry him to neglect or pass over the very forms of the laws of the land. Neither was there ever king, I am persuaded, that did consult so oft with his judges, as my lords that sit here know well. The judges are a kind of council of the king's by oath and ancient institution; but he useth them so indeed: he confers regularly with them upon their returns from their visitations and circuits; he gives them liberty, both to inform him, and to debate matters with him; and in the fall and conclusion commonly relies on their opinions.

As for the use of the prerogative, it runs within the ancient channels and banks: some things that were conceived to be in some proclamations, commissions, and patents, as overflows, have been by his wisdom and care reduced; whereby, no doubt, the main channel of his prerogative is so much the stronger. For evermore overflows do hurt the channel.

As for administration of justice between party and party, I pray observe these points. There is no news of great seal or signet that flies abroad for countenance or delay of causes: protections rarely granted, and only upon great ground, or by consent. My lords here of the council, and the king himself meddle not, as hath been used in former times, with matters of "meum" and "tuum," except they have apparent mixture with matters of estate, but leave them to the king's courts of law or equity. And for mercy and grace, without which there is no standing before justice, we see, the king now hath reigned twelve years in his white robe, without almost any aspersion of the crimson dye of blood. There sits my Lord Hobart, that served attorney seven years. I served with him. We were so happy, as there passed not through our hands any one arraignment for treason; and but one for any capital offence, which was that of the Lord Sanquhar; the noblest piece of justice, one of them, that ever came forth in any king's time.

As for penal laws, which lie as snares upon the subjects, and which were as a "nemo scit" to King Henry VII.; it yields a revenue that will scarce pay for the parchment of the king's records at Westminster.

And, lastly, for peace, we see manifestly his majesty bears some resemblance of that great name, "a prince of peace:" he hath preserved his subjects during his reign in peace, both within and without. For the peace with states abroad, we have it "usque ad satietatem:" and for peace in the lawyers' phrase, which count trespasses, and forces, and riots, to be "contra pacem;" let me give your lordships this token or taste, that this court, where they should appear, had never less to do. And, certainly, there is no better sign of "omnia bene," than when this court is in a still.

But, my lords, this is a sea of matter: and therefore I must give it over, and conclude, that there was never king reigned in this nation that did better keep covenant in preserving the liberties

and procuring the good of his people: so that I must needs say for the subjects of England,

"O fortunatos nimium sua si bona norint;"

as no doubt they do both know and acknowledge it; whatsoever a few turbulent discourses may, through the lenity of the time, take boldness to speak.

And as for this particular, touching the benevolence, wherein Mr. I. S. doth assign this breach of covenant, I leave it to others to tell you what the king may do, or what other kings have done: but I have told you what our king and my lords have done: which I say and say again, is so far from introducing a new precedent, as it doth rather correct, and mollify, and qualify former precedents.

Now, Mr. I. S., let me tell you your fault in few words: for that I am persuaded you see it already, though I woo no man's repentance; but I shall, as much as in me is, cherish it where I find it. Your offence hath three parts knit together:

Your slander,
Your menace, and
Your comparison.

For your slander, it is no less than that the king is perjured in his coronation oath. No greater offence than perjury; no greater oath than that of a coronation. I leave it: it is too great to aggravate.

Your menace, that if there were a Bullingbroke, or I cannot tell what, there were matter for him, is a very seditious passage. You know well, that howsoever Henry the Fourth's act, by a secret providence of God, prevailed, yet it was but a usurpation; and if it were possible for such a one to be this day, wherewith it seems your dreams are troubled, I do not doubt, his end would be upon the block; and that he would sooner have the ravens sit upon his head at London bridge, than the crown at Westminster. And it is not your interlacing of your "God forbid," that will salve these seditious speeches; neither could it be a forewarning, because the matter was past and not revocable, but a very stirring up and incensing of the people. If I should say to you, for example, "If these times were like some former times, of King Henry VIII., or some other times, (which God forbid!) Mr. I. S., it would cost you your life; I am sure you would not think this to be a gentle warning, but rather that I incensed the court against you.

And for your comparison with Richard II., I see you follow the example of them that brought him upon the stage, and into print, in Queen Elizabeth's time, a most prudent and admirable queen. But let me entreat you, that when you will speak of Queen Elizabeth or King James, you would compare them to King Henry VII., or King Edward I., or some other parallels to which they are alike. And this I would wish both you and all to take heed of, how you speak seditious matter in parables, or by tropes or examples. There is a thing in an indictment called an inuendo; you must beware how you beckon or make signs upon the king in a dangerous sense; but I will contain myself, and press this no farther. I may hold you for turbulent or presumptuous; but I hope you are not disloyal: you are graciously and mercifully dealt with. And, therefore, having now opened to my lords, and, as I think, to your own heart and conscience, the principal part of your offence, which concerns the king, I leave the rest, which concerns the law, parliament, and the subjects that have given, to Mr. Serjeant and Mr. Solicitor.

THE CHARGE

OF SIR FRANCIS BACON, KNIGHT,

THE KING'S ATTORNEY-GENERAL,

AGAINST

MR. LUMSDEN, SIR JOHN WENTWORTH, AND SIR JOHN HOLLES,

FOR SCANDAL AND TRADUCING OF THE KING'S JUSTICE IN THE PROCEEDINGS AGAINST WESTON, IN THE STAR CHAMBER, TENTH NOVEMBER, 1615.

The offence wherewith I shall charge the three offenders at the bar, is a misdemeanor of a high nature, tending to the defacing and scandal of justice in a great cause capital. The particular charge is this:

The king amongst many his princely virtues is known to excel in that proper virtue of the imperial throne, which is justice. It is a royal virtue, which doth employ the other three cardinal virtues in her service: wisdom to discover, and discern

nocent or innocent; fortitude to prosecute and execute; temperance, so to carry justice as it be not passionate in the pursuit, nor confused in involving persons upon light suspicion, nor precipitate in time. For this his majesty's virtue of justice, God hath of late raised an occasion, and erected, as it were, a stage or theatre, much to his honour, for him to show it, and act in the pursuit of the untimely death of Sir Thomas Overbury, and therein cleansing the land from blood. For, my lords, if blood spilt pure doth cry to heaven in God's ears, much more blood defiled with poison.

This great work of his majesty's justice, the more excellent it is, your lordships will soon conclude the greater is the offence of any that have sought to affront it or traduce it. And, therefore, before I descend unto the charge of these offenders, I will set before your lordships, the weight of that which they have sought to impeach; speaking somewhat of the general crime of impoisonment, and then of the particular circumstances of this fact upon Overbury; and, thirdly, and chiefly, of the king's great and worthy care and carriage in this business.

The offence of impoisonment is most truly figured in that device or description, which was made of the nature of one of the Roman tyrants, that he was "lutum sanguine maceratum," mire mingled or cemented with blood: for, as it is one of the highest offences in guiltiness, so it is the basest of all others in the mind of the offenders. Treasons "magnum aliquid spectant:" they aim at great things; but this is vile and base. I tell your lordships what I have noted, that in all God's book, both of the Old and New Testament, I find examples of all other offences and offenders in the world, but not any one of an impoisonment or an impoisoner. I find mention of fear of casual impoisonment: when the wild vine was shred into the pot, they came complaining in a fearful manner; Master, "mors in olla." And I find mention of poisons of beasts and serpents; "the poison of asps is under their lips." But I find no example in the book of God of impoisonment. I have sometimes thought of the words in the psalm, "let their table be made a snare." Which certainly is most true of impoisonment; for the table, the daily bread, for which we pray, is turned to a deadly snare: but, I think rather, that that was meant of the treachery of friends that were participant of the same table.

But let us go on. It is an offence, my lords, that hath the two spurs of offending; "spes perficiendi," and "spes celandi:" it is easily committed, and easily concealed.

It is an offence that is "tanquam sagitta nocte volans;" it is the arrow that flies by night. It discerns not whom it hits: for many times the poison is laid for one, and the other takes it; as in Sanders's case, where the poisoned apple was laid for the mother, and was taken up by the child, and killed the child: and so in that notorious case, whereupon the statute of 22 Henry VIII., chap. 9, was made, where the intent being to poison but one or two, poison was put into a little vessel of barm that stood in the kitchen of the Bishop of Rochester's house; of which barm pottage or gruel was made, wherewith seventeen of the bishop's family were poisoned: nay, divers of the poor that came to the bishop's gate, and had the broken pottage in alms, were likewise poisoned. And, therefore, if any man will comfort himself, or think with himself, Here is great talk of impoisonment, I hope I am safe; for I have no enemies; nor I have nothing that any body should long for: Why, that is all one; for he may sit at table by one for whom poison is prepared, and have a drench of his cup, or of his pottage.

And so, as the poet saith, "concidit infelix alieno vulnere;" he may die another man's death. And, therefore, it was most gravely, and judiciously, and properly provided by that statute, that impoisonment should be high treason; because whatsoever offence tendeth to the utter subversion and dissolution of human society, is in the nature of high treason.

Lastly, it is an offence that I may truly say of it, "non est nostri generis, nec sanguinis." It is, thanks be to God, rare in the isle of Britain: it is neither of our country, nor of our church; you may find it in Rome or Italy. There is a region, or perhaps a religion for it: and if it should come amongst us, certainly it were better living in a wilderness than in a court.

For the particular fact upon Overbury. First, for the person of Sir Thomas Overbury: I knew the gentleman. It is true, his mind was great, but it moved not in any good order; yet, certainly it did commonly fly at good things; and the greatest fault that I ever heard of him, was, that he made his friend his idol. But I leave him as Sir Thomas Overbury.

But take him as he was, the king's prisoner in the tower; and then see how the case stands. In that place the state is as it were respondent to make good the body of a prisoner. And, if any thing happen to him there, it may, though not in this case, yet in some others, make an aspersion and reflection upon the state itself. For the person is utterly out of his own defence; his own care and providence can serve him nothing. He is in custody and preservation of law; and we have a maxim in our law, as my lords the judges know, that when a state is in preservation of law, nothing can destroy it, or hurt it. And God forbid but the like should be for the persons of those that are in custody of law; and therefore this was a circumstance of great aggravation.

Lastly, to have a man chased to death in such manner, as it appears now by matter of record;

for other privacy of the cause I know not, by poison after poison; first roseaker, then arsenic, then mercury sublimate, then sublimate again; it is a thing would astonish man's nature to hear it. The poets feign, that the Furies had whips, that they were corded with poisonous snakes; and a man would think that this were the very case, to have a man tied to a post, and to scourge him to death with snakes; for so may truly be termed diversity of poisons.

Now I will come to that which is the principal; that is, his majesty's princely, yea, and, as I may truly term it, sacred proceeding in this cause. Wherein I will speak of the temper of his justice, and then of the strength thereof.

First, it pleased my lord chief justice to let me know, that which I heard with great comfort, which was the charge that his majesty gave to himself first, and afterwards to the commissioners in this case, worthy certainly to be written in letters of gold, wherein his majesty did forerank and make it his prime direction, that it should be carried, without touch to any that was innocent; nay, more, not only without impeachment, but without aspersion: which was a most noble and princely caution from his majesty; for men's reputations are tender things, and ought to be, like Christ's coat, without seam. And it was the more to be respected in this case, because it met with two great persons; a nobleman that his majesty had favoured and advanced, and his lady, being of a great and honourable house: though I think it be true that the writers say, That there is no pomegranate so fair or so sound, but may have a perished kernel. Nay, I see plainly, that in those excellent papers of his majesty's own handwriting, being as so many beams of justice issuing from that virtue which doth shine in him; I say, I see it was so evenly carried, without prejudice, whether it were a true accusation of the one part, or a practice of a false accusation on the other, as showed plainly that his majesty's judgment was "tanquam tabula rasa," as a clean pair of tables, and his ear "tanquam janua aperta," as a gate not side open, but wide open to truth, as it should be by little and little discovered. Nay, I see plainly, that, at the first, till farther light did break forth, his majesty was little moved with the first tale, which he vouchsafeth not so much as the name of a tale; but calleth it a rumour, which is a heedless tale.

As for the strength or resolution of his majesty's justice, I must tell your lordships plainly; I do not marvel to see kings thunder out justice in cases of treason, when they are touched themselves; and that they are "vindices doloris proprii:" but that a king should, "pro amore justitiæ" only, contrary to the tide of his own affection, for the preservation of his people, take such care of a cause of justice, that is rare and worthy to be celebrated far and near. For, I think, I may truly affirm, that there was never in this kingdom, nor in any other kingdom, the blood of a private gentleman vindicated "cum tanto motu regni," or, to say better, "cum tanto plausu regni." If it had concerned the king or prince, there could not have been greater nor better commissioners to examine it. The term hath been almost turned into a "justitium," or vacancy; the people themselves being more willing to be lookers on in this business, than to follow their own. There hath been no care of discovery omitted, no moment of time lost. And, therefore, I will conclude this part with the saying of Solomon, "Gloria Dei celare rem, et gloria regis scrutari rem." And his majesty's honour is much the greater for that he hath showed to the world in this business, as it hath relation to my Lord of Somerset, whose case in no sort I do prejudge, being ignorant of the secrets of the cause, but taking him as the law takes him hitherto, for a subject, I say, the king hath to his great honour showed, that were any man, in such a case of blood, as the signet upon his right hand, as the Scripture says, yet would he put him off.

Now will I come to the particular charge of these gentlemen, whose qualities and persons I respect and love; for they are all my particular friends: but now I can only do this duty of a friend to them, to make them know their fault to the full.

And, therefore, first, I will by way of narrative declare to your lordships the fact, with the occasion of it; then you shall have their confessions read, upon which you are to proceed, together with some collateral testimonies by way of aggravation: and, lastly, I will note and observe to your lordships the material points which I do insist upon for their charge, and so leave them to their answer: and this I will do very briefly, for the case is not perplexed.

That wretched man, Weston, who was the actor or mechanical party in this impoisonment, at the first day being indicted by a very substantial jury of selected citizens, to the number of nineteen, who found "billa vera," yet, nevertheless, at the first stood mute: but after some days' intermission, it pleased God to cast out the dumb devil, and that he did put himself upon his trial; and was, by a jury also of great value, upon his confession, and other testimonies, found guilty: so as thirty-one sufficient jurors have passed upon him. Whereupon judgment and execution was awarded against him. After this, being in preparation for another world, he sent for Sir John Overbury's father, and falling down upon his knees, with great remorse and compunction, asked him forgiveness. Afterwards, again, of his own motion, desired to have his like prayer of forgiveness recommended to his mother, who was absent. And at both times, out of the abundance of his heart, confessed that he was to die justly, and

that he was worthy of death. And after, again, at his execution, which is a kind of sealing-time of confessions, even at the point of death, although there were tempters about him, as you shall hear by-and-by, yet he did again confirm publicly, that his examinations were true, and that he had been justly and honourably dealt with. Here is the narrative, which induceth the charge. The charge itself is this.

Mr. L., whose offence stands alone single, the offence of the other two being in consort; and yet all three meeting in their end and centre, which was to interrupt or deface this excellent piece of justice; Mr. L., I say, meanwhile between Weston's standing mute and his trial, takes upon him to make a most false, odious, and libellous relation, containing as many untruths as lines, and sets it down in writing with his own hand, and delivers it to Mr. Henry Gibb, of the bed-chamber, to be put into the king's hand; in which writing he doth falsify and pervert all that was done the first day at the arraignment of Weston; turning the pike and point of his imputations principally upon my Lord Chief Justice of England; whose name, thus occurring, I cannot pass by, and yet I cannot skill to flatter. But this I will say of him, and I would say as much to ages, if I should write a story; that never man's person and his place were better met in a business, than my Lord Coke and my lord chief justice, in the cause of Overbury.

Now, my lords, in this offence of M. L., for the particulars of these slanderous articles, I will observe them unto you when the writings and examinations are read; for I do not love to set the gloss before the text. But, in general, I note to your lordships, first, the person of M. L. I know he is a Scotch gentleman, and thereby more ignorant of our laws and forms: but I cannot tell whether this doth extenuate his fault in respect of ignorance, or aggravate it much, in respect of presumption; that he would meddle in that that he understood not: but I doubt it came not out of his quiver: some other man's cunning wrought upon this man's boldness. Secondly, I may note unto you the greatness of the cause, wherein he, being a private mean gentleman, did presume to deal. M. L. could not but know to what great and grave commissioners the king had committed this cause; and that his majesty in his wisdom would expect return of all things from them to whose trust he had committed this business. For it is the part of commissioners, as well to report the business, as to manage the business; and then his majesty might have been sure to have had all things well weighed, and truly informed: and, therefore, it should have been far from M. L. to have presumed to have put forth his hand to so high and tender a business, which was not to be touched but by employed hands. Thirdly, I note to your lordships, that this infusion of a slander into a king's ear, is of all forms of libels and slanders the worst. It is true, that kings may keep secret their informations, and then no man ought to inquire after them, while they are shrined in their breast. But where a king is pleased that a man shall answer for his false information; there, I say, the false information to a king exceeds in offence the false information of any other kind; being a kind, since we are in a matter of poison, of impoisonment of a king's ear. And thus much for the offence of M. L.

For the offence of S. W. and H. I., which I said was in consort, it was shortly this. At the time and place of the execution of Weston, to supplant his Christian resolution, and to scandalize the justice already past, and perhaps to cut off the thread of that which is to come, these gentlemen, with others, came mounted on horseback, and in a ruffling and facing manner put themselves forward to re-examine Weston upon questions: and what questions? Directly cross to that that had been tried and judged. For what was the point tried? That Weston had poisoned Overbury. What was S. W.'s question? Whether Weston did poison Overbury or no? A contradictory directly: Weston answered only, that he did him wrong; and turning to the sheriff, said, You promised me I should not be troubled at this time. Nevertheless, he pressed him to answer; saying he desired to know it, that he might pray with him. I know not that S. W. is an ecclesiastic, that he should cut any man from the communion of prayer. And yet for all this vexing of the spirit of a poor man, now in the gates of death; Weston, nevertheless, stood constant, and said, I die not unworthily; my lord chief justice hath my mind under my hand, and he is an honourable and just judge. This is S. W. his offence.

For H. I., he was not so much a questionist; but wrought upon the other's questions, and, like a kind of confessor, wished him to discharge his conscience, and to satisfy the world. What world? I marvel! it was sure the world at Tyburn. For the world at Guildhall, and the world at London, was satisfied before; "teste" the bells that rung. But men have got a fashion now-a-days, that two or three busy-bodies will take upon them the name of the world, and broach their own conceits, as if it were a general opinion. Well, what more? When they could not work upon Weston, then H. I. in an indignation turned about his horse, when the other was turning over the ladder, and said, he was sorry for such a conclusion; that was, to have the state honoured or justified; but others took and reported his words in another degree: but that I leave, seeing it is not confessed.

H. I., his offence had another appendix, before

this in time; which was, that at the day of the verdict given up by the jury, he also would needs give his verdict, saying openly, that if he were of the jury, he would doubt what to do. Marry, he saith, he cannot tell well whether he spake this before the jury had given up the verdict, or after; wherein there is little gained. For whether H. I. were a pre-juror or a post-juror, the one was to prejudge the jury, the other as to taint them.

Of the offence of these two gentlemen in general, your lordships must give me leave to say, that it is an offence greater and more dangerous than is conceived. I know well that, as we have no Spanish inquisitions, nor justice in a corner; so we have no gagging of men's mouths at their death: but that they may speak freely at the last hour; but then it must come from the free motion of the party, not by temptation of questions.

The questions that are to be asked ought to tend to farther revealing of their own or others guiltiness; but to use a question in the nature of a false interrogatory, to falsify that which is "res judicata," is intolerable. For that were to erect a court of commission of review at Tyburn, against the King's Bench at Westminster. And, besides, it is a thing vain and idle: for if they answer according to the judgment past, it adds no credit; or if it be contrary, it derogateth nothing: but yet it subjecteth the majesty of justice to popular and vulgar talk and opinion.

My lords, these are great and dangerous offences; for if we do not maintain justice, justice will not maintain us.

But now your lordships shall hear the examinations themselves, upon which I shall have occasion to note some particular things, &c.

A CHARGE DELIVERED

BY SIR FRANCIS BACON, KNIGHT,

THE KING'S SOLICITOR-GENERAL,

AT THE

ARRAIGNMENT OF THE LORD SANQUHAR,

IN THE KING'S BENCH AT WESTMINSTER.

THE ARGUMENT.

The Lord Sanquhar, a Scotch nobleman, having, in private revenge, suborned Robert Carlile to murder John Turner, master of fence, thought, by his greatness, to have borne it out; but the king, respecting nothing so much as justice, would not suffer nobility to be a shelter for villany; but, according to law, on the 29th of June, 1612, the said Lord Sanquhar, having been arraigned and condemned, by the name of Robert Creighton, Esq., was, before Westminster-hall Gate, executed, where he died very penitent. At whose arraignment my Lord Bacon, then solicitor-general to King James, made this speech following:

In this cause of life and death, the jury's part is in effect discharged; for after a frank and formal confession, their labour is at an end: so that what hath been said by Mr. Attorney, or shall be said by myself, is rather convenient than necessary.

My Lord Sanquhar, your fault is great, and cannot be extenuated, and it need not be aggravated; and if it needed, you have made so full an anatomy of it out of your own feeling, as it cannot be matched by myself, or any man else, out of conceit; so as that part of aggravation I leave. Nay, more, this Christian and penitent course of yours draws me thus far, that I will agree, in some sort extenuates it; for certainly, as even in extreme evils there are degrees; so this particular of your offence is such as, though it be foul spilling of blood, yet there are more foul: for if you had sought to take away a man's life for his vineyard, as Ahab did; or for envy, as Cain did; or to possess his bed, as David did; surely the murder had been more odious.

Your temptation was revenge, which the more natural it is to man, the more have laws both divine and human sought to repress it; "Mihi vindicta." But in one thing you and I shall never agree, that generous spirits, you say, are hard to forgive: no, contrariwise, generous and magna

nimous minds are readiest to forgive; and it is a weakness and impotency of mind to be unable to forgive;

"Corpora magnanimo satis est prostrasse leoni."

But, howsoever, murders may arise from several motives, less or more odious, yet the law both of God and man involves them in one degree, and, therefore, you may read that in Joab's case, which was a murder upon revenge, and matcheth with your case; he, for a dear brother, and you for a dear part of your own body; yet there was a severe charge given, it should not be unpunished.

And certainly the circumstance of time is heavy upon you: it is now five years since this unfortunate man Turner, be it upon accident, or be it upon despite, gave the provocation, which was the seed of your malice. All passions are suaged with time: love, hatred, grief; all fire itself burns out with time, if no new fuel be put to it. Therefore, for you to have been in the gall of bitterness so long, and to have been in a restless chase of this blood so many years, is a strange example; and I must tell you plainly, that I conceive you have sucked those affections of dwelling in malice, rather out of Italy and outlandish manners, where you have conversed, than out of any part of this island, England or Scotland.

But that which is fittest for me to spend time in, the matter being confessed, is to set forth and magnify to the hearers, the justice of this day; first of God, and then of the king.

My lord, you have friends and entertainments in foreign parts; it had been an easy thing for you to set Carlile, or some other bloodhound on work, when your person had been beyond the seas; and so this news might have come to you in a packet, and you might have looked on how the storm would pass: but God bereaved you of this foresight, and closed you here under the hand of a king that, though abundant in clemency, yet is no less zealous of justice.

Again, when you came in at Lambeth, you might have persisted in the denial of the procurement of the fact; Carlile, a resolute man, might perhaps have cleared you, for they that are resolute in mischief, are commonly obstinate in concealing the procurers, and so nothing should have been against you but presumption. But then also, God, to take away all obstruction of justice, gave you the grace, which ought indeed to be more true comfort to you, than any device whereby you might have escaped, to make a clear and plain confession.

Other impediments there were, not a few, which might have been an interruption to this day's justice, had not God in his providence removed them.

But, now that I have given God the honour, let me give it likewise where it is next due, which is to the king our sovereign.

This murder was no sooner committed, and brought to his majesty's ears, but his just indignation, wherewith he first was moved, cast itself into a great deal of care and providence to have justice done. First came forth his proclamation, somewhat of a rare form, and devised, and in effect dictated by his majesty himself; and by that he did prosecute the offenders, as it were with the breath and blast of his mouth. Then did his majesty stretch forth his long arms, for kings have long arms when they will extend them, one of them to the sea, where he took hold of Grey shipped for Sweden, who gave the first light of testimony; the other arm to Scotland, and took hold of Carlile, ere he was warm in his house, and brought him the length of his kingdom under such safe watch and custody, as he could have no means to escape, no, nor to mischief himself, no, nor learn any lessons to stand mute; in which cases, perhaps, this day's justice might have received a stop. So that I may conclude his majesty hath showed himself God's true lieutenant, and that he is no respecter of persons; but the English, Scottish, nobleman, fencer, are to him alike in respect of justice.

Nay, I must say farther, that his majesty hath had, in this, a kind of prophetical spirit; for what time Carlile and Grey, and you, my lord, yourself, were fled no man knew whither, to the four winds, the king ever spake in a confident and undertaking manner, that wheresoever the offenders were in Europe, he would produce them forth to justice; of which noble word God hath made him master.

Lastly, I will conclude towards you, my lord, that though your offence hath been great, yet, your confession hath been free, and your behaviour and speech full of discretion; and this shows, that though you could not resist the tempter, yet you bear a Christian and generous mind, answerable to the noble family of which you are descended. This I commend unto you, and to take it to be an assured token of God's mercy and favour, in respect whereof all worldly things are but trash; and so it is fit for you, as your state now is, to account them. And this is all I will say for the present.

[*Note.* The reader, for his fuller information in this story of the Lord Sanquhar, is desired to peruse the case in the ninth book of the Lord Coke's Reports; at the end of which the whole series of the murder and trial is exactly related.]

THE CHARGE OF OWEN,

INDICTED OF HIGH TREASON, IN THE KING'S BENCH,

BY SIR FRANCIS BACON, KNIGHT,

HIS MAJESTY'S ATTORNEY-GENERAL.

The treason wherewith this man standeth charged, is, for the kind and nature of it, ancient, as ancient as there is any law of England; but in the particular, late and upstart: and, again, in the manner and boldness of the present case, new, and almost unheard of till this man. Of what mind he is now, I know not; but I take him as he was, and as he standeth charged. For, high treason is not written in ice; that when the body relenteth, the impression should go away.

In this cause the evidence itself will spend little time: time, therefore, will be best spent in opening fully the nature of this treason, with the circumstances thereof; because the example is more than the man. I think good, therefore, by way of inducement and declaration in this cause, to open unto the court, jury, and hearers, five things.

The first is, the clemency of the king; because it is news, and a kind of rarity to have a proceeding in this place upon treason: and, perhaps, it may be marvelled by some, why, after so long an intermission, it should light upon this fellow; being a person but contemptible, a kind of venomous fly, and a hangby of the seminaries.

The second is, the nature of this treason, as concerning the fact, which, of all kinds of compassing the king's death, I hold to be the most perilous, and as much differing from other conspiracies, as the lifting up of a thousand hands against the king, like the giant Briareus, differs from lifting up one or a few hands.

The third point that I will speak unto is, the doctrine or opinion, which is the ground of this treason; wherein I will not argue or speak like a divine or scholar, but as a man bred in a civil life; and, to speak plainly, I hold the opinion to be such, that deserveth rather detestation than contestation.

The fourth point is, the degree of this man's offence, which is more presumptuous, than I have known any other to have fallen into in this kind, and hath a greater overflow of malice and treason.

And, fifthly, I will remove somewhat that may seem to qualify and extenuate this man's offence; in that he hath not affirmed simply that it is lawful to kill the king, but conditionally; that, if the king be excommunicated, it is lawful to kill him: which maketh little difference either in law or peril.

For the king's clemency, I have said it of late upon a good occasion, and I still speak it with comfort: I have now served his majesty's solicitor and attorney eight years and better; yet, this is the first time that ever I gave in evidence against a traitor at this bar, or any other. There hath not wanted matter in that party of the subjects whence this kind of offence floweth, to irritate the king: he hath been irritated by the powder of treason, which might have turned judgment into fury. He hath been irritated by wicked and monstrous libels; irritated by a general insolency and presumption in the Papists throughout the land; and, yet, I see his majesty keepeth Cæsar's rule: "Nil malo, quam eos esse similes sui, et me mei." He leaveth them to be like themselves; and he remaineth like himself, and striveth to overcome evil with goodness. A strange thing, bloody opinions, bloody doctrines, bloody examples, and yet, the government still unstained with blood. As for this Owen that is brought in question, though his person be in his condition contemptible; yet, we see by miserable examples, that these wretches, which are but the scum of the earth, have been able to stir earthquakes by murdering princes; and, if it were in case of contagion, as this is a contagion of the heart and soul, a rascal may bring in a plague into the city, as well as a great man: so, it is not the person, but the matter that is to be considered.

For the treason itself, which is the second point, my desire is to open it in the depth thereof, if it were possible; but, it is bottomless: I said in the beginning, that this treason, in the nature of it, was old. It is not of the treasons whereof it may be said, from the beginning it was not so. You are indicted, Owen, not upon any statute made against the pope's supremacy, or other matters, that have reference to religion; but merely upon that law which was born with the kingdom, and was law even in superstitious times, when the pope was received. The compassing and imagining of the king's death was treason. The statute of 25 Edw. III., which was but declaratory, begins with this article as the capital of capitals in treason, and of all others the most odious, and the most perilous: and so the civil law saith, "Conjurationes omnium proditionum

odiosissimæ et perniciosissimæ." Against hostile invasions and the adherence of subjects to enemies, kings can arm. Rebellions must go over the bodies of many good subjects before they can hurt the king: but conspiracies against the persons of kings, are like thunderbolts that strike upon the sudden, hardly to be avoided. "Major metus a singulis," saith he, "quam ab universis." There is no preparation against them: and that preparation which may be of guard or custody, is a perpetual misery. And, therefore, they that have written of the privileges of ambassadors, and of the amplitude of safe-conducts, have defined, that, if an ambassador, or a man that cometh in upon the highest safe-conducts, do practise matter of sedition in a state, yet, by the law of nations, he ought to be remanded; but, if he conspire against the life of a prince by violence or poison, he is to be justiced: "Quia odium est omni privilegio majus." Nay, even amongst enemies, and in the most deadly wars, yet, nevertheless, conspiracy and assassination of princes hath been accounted villanous and execrable.

The manners of conspiring and compassing the king's death, are many: but, it is most apparent, that amongst all the rest, this surmounteth. First, because it is grounded upon pretenced religion; which is a trumpet that inflameth the heart and powers of a man with daring and resolution more than any thing else. Secondly, it is the hardest to be avoided; for, when a particular conspiracy is plotted or attempted against a king by some one, or some few conspirators, it meets with a number of impediments. Commonly, he that hath the head to devise it, hath not the heart to undertake it: and the person that is used, sometimes faileth in courage; sometimes faileth in opportunity; sometimes is touched with remorse. But to publish and maintain, that it may be lawful for any man living to attempt the life of a king, this doctrine is a venemous sop; or as a legion of malign spirits, or a universal temptation, doth enter at once into the hearts of all that are any way prepared, or of any predisposition to be traitors; so that whatsoever faileth in any one, is supplied in many. If one man faint, another will dare: if one man hath not the opportunity, another hath; if one man relent, another will be desperate. And, thirdly, particular conspiracies have their periods of time, within which, if they be not taken, they vanish; but this is endless, and importeth perpetuity of springing conspiracies. And so much concerning the nature of the fact.

For the third point, which is the doctrine; that upon an excommunication of the pope, with sentence of deposing, a king by any son of Adam may be slaughtered; and, that it is justice, and no murder; and, that their subjects are absolved of their allegiance, and the kings themselves exposed to spoil and prey. I said before, that I would not argue the subtlety of the question: it is rather to be spoken to by way of accusation of the opinion as impious, than by way of dispute of it as doubtful. Nay, I say, it deserveth rather some holy war or league amongst all Christian princes of either religion, for the extirpating and rasing of the opinion, and the authors thereof, from the face of the earth, than the style of pen or speech. Therefore, in this kind I will speak to it a few words, and not otherwise. Nay, I protest, if I were a Papist, I should say as much: nay, I should speak it, perhaps, with more indignation and feeling. For this horrible opinion is our advantage, and it is their reproach, and will be their ruin.

This monster of opinion is to be accused of three most evident and most miserable slanders.

First, Of the slander it bringeth to the Christian faith, being a plain plantation of irreligion and atheism.

Secondly, The subversion which it introduceth into all policy and government.

Thirdly, The great calamity it bringeth upon Papists themselves; of which the more moderate sort, as men misled, are to be pitied.

For the first, if a man doth visit the foul and polluted opinions, customs, or practices of heathenism, Mahometanism, and heresy, he shall find they do not attain to this height. Take the examples of damnable memory amongst the heathens. The proscriptions in Rome of Sylla, and afterwards of the Triumvirs, what were they? They were but of a finite number of persons, and those not many that were exposed unto any man's sword. But what is that to the proscribing of a king, and all that shall take his part? And what was the reward of a soldier that amongst them killed one of the proscribed? A small piece of money. But what is now the reward of one that shall kill a king? The kingdom of heaven. The custom among the heathen that was most scandalized was, that some times the priest sacrificed men; but yet you shall not read of any priesthood that sacrificed kings.

The Mahometans make it a part of their religion to propagate their sect by the sword; but yet still by honourable wars, never by villanies and secret murders. Nay, I find that the Saracen prince, of whom the name of the assassins is derived, which had divers votaries at commandment, which he sent and employed to the killing of divers princes in the east, by one of whom Amurath the First was slain, and Edward the First of England was wounded, was put down and rooted out by common consent of the Mahometan princes.

The Anabaptists, it is true, come nearest. For they profess the pulling down of magistrates: and they can chant the psalm, "To bind their kings in chains, and their nobles in fetters of iron." This is the glory of the saints, much like the temporal authority that the pope challengeth over princes. But this is the difference, that that is

a furious and fanatical fury, and this is a sad and solemn mischief: he "imagineth mischief as a law;" a law-like mischief.

As for the defence which they do make, it doth aggravate the sin, and turneth it from a cruelty towards man to a blasphemy towards God. For to say that all this is "in ordine ad spirituale," and to a good end, and for the salvation of souls; it is directly to make God author of evil, and to draw him in the likeness of the prince of darkness; and to say with those that Saint Paul speaketh of, "Let us do evil that good may come thereof;" of whom the apostle saith definitively, "that their damnation is just."

For the destroying of government universally, it is most evident, that it is not the case of Protestant princes only, but of Catholic princes likewise; as the king hath excellently set forth. Nay, it is not the case of princes only, but of all subjects and private persons. For, touching princes, let history be perused, what hath been the causes of excommunication; and, namely, this tumour of it, the deposing of kings; it hath not been for heresy and schism alone, but for collation and investitures of bishoprics and benefices, intruding upon ecclesiastical possessions, violating of any ecclesiastical person or liberty. Nay, generally they maintain it, that it may be for any sin: so that the difference wherein their doctors vary, that some hold that the pope hath his temporal power immediately, and others but "in ordine ad spirituale," is but a delusion and an abuse. For all cometh to one. What is there that may not be made spiritual by consequence: especially when he that giveth the sentence may make the case? and accordingly hath the miserable experience followed. For this murdering of kings hath been put in practice, as well against Papist kings as Protestant: save that it hath pleased God so to guide it by his admirable providence, as the attempts upon Papist princes have been executed, and the attempts upon Protestant princes have failed, except that of the Prince of Orange: and not that neither, until such time as he had joined too fast with the Duke of Anjou and the Papists. As for subjects, I see not, nor ever could discern, but that, by infallible consequence, it is the case of all subjects and people, as well as of kings; for it is all one reason, that a bishop, upon an excommunication of a private man, may give his lands and goods in spoil, or cause him to be slaughtered, as for the pope to do it towards a king; and for a bishop to absolve the son from duty to the father, as for the pope to absolve the subject from his allegiance to his king. And this is not my inference, but the very affirmative of Pope Urban the Second, who, in a brief to Godfrey, Bishop of Luca, hath these very words, which Cardinal Baronius reciteth in his Annals, "Non illos homicidas arbitramur, qui adversus excommunicatos zelo Catholicæ matris ardentes eorum quoslibet trucidare contigerit," speaking generally of all excommunications.

THE CHARGE

OF SIR FRANCIS BACON, KNIGHT,

HIS MAJESTY'S ATTORNEY-GENERAL,

AGAINST

FRANCES, COUNTESS OF SOMERSET;

INTENDED TO HAVE BEEN SPOKEN BY HIM AT HER ARRAIGNMENT, ON FRIDAY, MAY 24, 1616, IN CASE SHE HAD PLEADED NOT GUILTY.*

IT MAY PLEASE YOUR GRACE, MY LORD HIGH STEWARD OF ENGLAND,† AND YOU, MY LORDS, THE PEERS.

You have heard the indictment against this lady well opened; and likewise the point in law, that might make some doubt, declared and solved; wherein certainly the policy of the law of England is much to be esteemed, which requireth and respecteth form in the indictment, and substance in the proof.

This scruple, it may be, hath moved this lady to plead not guilty, though for the proof I shall not need much more than her own confession, which she hath formerly made, free and voluntary, and therein given glory to God and justice.

* She pleaded guilty, on which occasion the attorney-general spoke a charge somewhat different from this.

† Thomas Egerton, Viscount Ellesmere, lord high chancellor.

And certainly confession, as it is the strongest foundation of justice, so it is a kind of corner-stone, whereupon justice and mercy may meet.

The proofs, which I shall read in the end for the ground of your verdict and sentence, will be very short; and as much as may serve to satisfy your honours and consciences for the conviction of this lady, without wasting of time in a case clear and confessed; or ripping up guiltiness against one, that hath prostrated herself by confession; or preventing or deflowering too much of the evidence. And, therefore, the occasion itself doth admonish me to spend this day rather in declaration than in evidence, giving God and the king the honour, and your lordships and the hearers the contentment, to set before you the proceeding of this excellent work of the king's justice, from the beginning to the end; and so to conclude with the reading the confessions and proofs.

My lords, this is now the second time* within the space of thirteen years reign of our happy sovereign, that this high tribunal-seat of justice, ordained for the trial by peers, hath been opened and erected; and that, with a rare event, supplied and exercised by one and the same person, which is a great honour to you, my lord steward.

In all this mean time the king hath reigned in his white robe, not sprinkled with any drop of blood of any of his nobles of this kingdom. Nay, such have been the depths of his mercy, as even those noblemen's bloods, against whom the proceeding was at Winchester, Cobham and Grey, were attainted and corrupted, but not spilt or taken away; but that they remained rather spectacles of justice in their continual imprisonment, than monuments of justice in the memory of their suffering.

It is true, that the objects of his justice then and now were very differing. For then, it was the revenge of an offence against his own person and crown, and upon persons that were malcontents, and contraries to the state and government. But now, it is the revenge of the blood and death of a particular subject, and the cry of a prisoner. It is upon persons that were highly in his favour; whereby his majesty, to his great honour, hath showed to the world, as if it were written in a sunbeam, that he is truly the lieutenant of Him with whom there is no respect of persons; that his affections royal are above his affections private; that his favours and nearness about him are not like popish sanctuaries to privilege malefactors: and that his being the best master of the world doth not let him from being the best king of the world. His people, on the other side, may say to themselves, "I will lie down in peace; for God and the king and the law protect me against great and small." It may be a discipline also to great men, especially such as are swoln in fortunes from small beginnings, that the king is as well able to level mountains, as to fill valleys, if such be their desert.

But to come to the present case; the great frame of justice, my lords, in this present action, hath a vault, and it hath a stage: a vault, wherein these works of darkness were contrived; and a stage with steps, by which they were brought to light. And, therefore, I will bring this work of justice to the period of this day; and then go on with this day's work.

Sir Thomas Overbury was murdered by poison on the 15th of September, 1613, 11 Reg. This foul and cruel murder did, for a time, cry secretly in the ears of God; but God gave no answer to it, otherwise than by that voice, which sometimes he useth, which is "vox populi," the speech of the people. For there went then a murmur, that Overbury was poisoned: and yet this same submiss and soft voice of God, the speech of the vulgar people, was not without a counter-tenor, or counter-blast of the devil, who is the common author both of murder and slander: for it was given out, that Overbury was dead of a foul disease; and his body, which they had made a "corpus Judaicum" with their poisons, so as it had no whole part, must be said to be leprosed with vice, and so his name poisoned as well as his body. For as to dissoluteness, I never heard the gentleman noted with it: his faults were insolency and turbulency, and the like of that kind: the other part of the soul, not the voluptuous.

Mean time, there was some industry used, of which I will not now speak, to lull asleep those that were the revengers of blood; the father and the brother of the murdered. And in these terms things stood by the space almost of two years, during which time God so blinded the two great procurers, and dazzled them with their own greatness, and did bind and nail fast the actors and instruments with security upon their protection, as neither the one looked about them, nor the other stirred or fled, nor were conveyed away: but remaineth here still, as under a privy arrest of God's judgments; insomuch as Franklin, that should have been sent over to the Palsgrave with good store of money, was, by God's providence, and the accident of a marriage of his, diverted and stayed.

But about the beginning of the progress last summer, God's judgments began to come out of their depths: and as the revealing of murders is commonly such, as a man may say, "a Domino hoc factum est;" it is God's work, and it is marvellous in our eyes: so in this particular, it is most admirable; for it came forth by a compliment and matter of courtesy.

My Lord of Shrewsbury*, that is now with

* The first time was on the trials of the Lords Cobham and Grey in November, 1603.

* Gilbert, Earl of Shrewsbury, Knight of the Garter, who died May 8, 1616.

God, recommended to a counsellor of state, of especial trust by his place, the late Lieutenant Helwisse,* only for acquaintance as an honest, worthy gentleman; and desired him to know him, and to be acquainted with him. That counsellor answered him civilly, that my lord did him a favour; and that he should embrace it willingly; but he must let his lordship know, that there did lie a heavy imputation upon that gentleman, Helwisse; for that Sir Thomas Overbury, his prisoner, was thought to have come to a violent and untimely death. When this speech was reported back by my Lord of Shrewsbury to Helwisse, "perculit illico animum," he was stricken with it; and being a politic man, and of likelihood doubting that the matter would break forth at one time or other, and that others might have the start of him, and thinking to make his own case by his own tale, resolved with himself, upon this occasion, to discover to my Lord of Shrewsbury and that counsellor, that there was an attempt, whereto he was privy, to have poisoned Overbury by the hands of his under-keeper, Weston; but that he checked it, and put it by, and dissuaded it, and related so much to him indeed: but then he left it thus, that it was but an attempt, or untimely birth, never executed; and as if his own fault had been no more, but that he was honest in forbidding, but fearful of revealing and impeaching or accusing great persons; and so with this fine point thought to save himself.

But that great counsellor of state wisely considering, that by the lieutenant's own tale it could not be simply a permission or weakness; for that Weston was never displaced by the lieutenant, notwithstanding that attempt; and coupling the sequel by the beginning, thought it matter fit to be brought before his majesty, by whose appointment Helwisse set down the like declaration in writing.

Upon this ground, the king playeth Solomon's part, "Gloria Dei celare rem: et gloria regis investigare rem;" and sets down certain papers of his own hand, which I might term to be "claves justitiæ," keys of justice; and may serve for a precedent both for princes to imitate, and for a direction for judges to follow: and his majesty carried the balance with a constant and steady hand, evenly and without prejudice, whether it were a true accusation of the one part, or a practice and factious device of the other: which writing, because I am not able to express according to the worth thereof, I will desire your lordship anon to hear read.

This excellent foundation of justice being laid by his majesty's own hand, it was referred unto some counsellors to examine farther, who gained some degrees of light from Weston, but yet left it imperfect.

After it was referred to Sir Edward Coke, chief justice of the King's Bench, as a person best practised in legal examinations, who took a great deal of indefatigable pains in it, without intermission, having, as I have heard him say, taken at least three hundred examinations in this business.

But these things were not done in a corner. I need not speak of them. It is true, that my lord chief justice, in the dawning and opening of the light, finding that the matter touched upon these great persons, very discreetly became suitor to the king to have greater persons than his own rank joined with him. Whereupon, your lordship, my Lord High Steward of England, to whom the king commonly resorteth "in arduis," and my lord steward of the king's house, and my Lord Zouch, were joined with him.

Neither wanted there, this while, practice to suppress testimony, to deface writings, to weaken the king's resolution, to slander the justice, and the like. Nay, when it came to the first solemn act of justice, which was the arraignment of Weston, he had his lesson to stand mute; which had arrested the wheel of justice. But this dumb devil, by the means of some discreet divines, and the potent charm of justice, together, was cast out. Neither did this poisonous adder stop his ear to those charms, but relented, and yielded to his trial.

Then follow the proceedings of justice against the other offenders, Turner, Helwisse, Franklin.

But all these being but the organs and instruments of this fact, the actors, and not the authors, justice could not have been crowned without this last act against these great persons. Else Weston's censure or prediction might have been verified, when he said, he hoped the small flies should not be caught and the great escape. Wherein the king being in great straits, between the defacing of his honour and of his creature, hath, according as he useth to do, chosen the better part, reserving always mercy to himself.

The time also of this justice hath had its true motions. The time until this lady's deliverance was due unto honour, Christianity, and humanity, in respect of her great belly. The time since was due to another kind of deliverance too; which was, that some causes of estate, that were in the womb, might likewise be brought forth, not for matter of justice, but for reason of state. Like-

* Sir Gervase Helwisse, appointed Lieutenant of the Tower, upon the removal of Sir William Waade on the 6th of May, 1612, ["Reliquiæ Wottonianæ," p. 412, 3d edit. 1672.] Mr. Chamberlain, in a MS. letter to Sir Dudley Carleton, dated at London, May 12, 1612, speaks of Sir Gervase's promotion in these terms. "One Sir Gervase Helwisse, of Lincolnshire, somewhat an unknown man, is put into the place [of Sir W. Waade's] by the favour of the lord chamberlain [Earl of Somerset] and his lady. The gentleman is of too mild and gentle a disposition for such an office. He is my old friend and acquaintance in France, and lately renewed in town, where he hath lived past a year, nor followed the court many a day." Sir Henry Wotton, in a letter of the 14th of May, 1612, ["ubi supra," p. 22,] says, that Sir Gervase had been before one of the pensioners.

wise this last procrastination of days had the like weighty grounds and causes. And this is the true and brief representation of this extreme work of the king's justice.

Now, for the evidence against this lady, I am sorry I must rip it up. I shall first show you the purveyance or provisions of the poisons; that they were seven in number brought to this lady, and by her billetted and laid up till they might be used: and this done with an oath or vow of secrecy, which is like the Egyptian darkness, a gross and palpable darkness, that may be felt.

Secondly, I shall show you the exhibiting and sorting of the same number or volley of poisons: white arsenic was fit for salt, because it is of like body and colour. The poison of great spiders, and of the venonious fly cantharides, was fit for pigs' sauce or partridge sauce, because it resembled pepper. As for mercury-water, and other poisons, they might be fit for tarts, which is a kind of hotch-pot, wherein no one colour is so proper: and some of these were delivered by the hands of this lady, and some by her direction.

Thirdly, I shall prove and observe unto you the cautions of these poisons; that they might not be too swift, lest the world should startle at it by the suddenness of the despatch: but they must abide long in the body, and work by degrees; and for this purpose there must be essays of them upon poor beasts, &c.

And, lastly, I shall show you the rewards of this impoisonment, first demanded by Weston, and denied, because the deed was not done; but after the deed done and perpetrated, that Overbury was dead, then performed and paid to the value of 180*l.*

And so, without farther aggravation of that, which in itself bears its own tragedy, I will conclude with the confessions of this lady herself, which is the strongest support of justice; and yet is the footstool of mercy. For, as the Scripture says, "Mercy and truth have kissed each other;" there is no meeting or greeting of mercy, till there be a confession, or trial of truth. For these read,

Franklin, November 16,
Franklin, November 17,
Rich. Weston, October 1,
Rich. Weston, October 2
Will. Weston, October 2,
Rich. Weston, October 3,
Helwisse, October 2,
The Countess's letter, without date,
The Countess's confession, January 8.

THE

CHARGE, BY WAY OF EVIDENCE,

BY

SIR FRANCIS BACON, KNIGHT,

HIS MAJESTY'S ATTORNEY-GENERAL,

BEFORE THE LORD HIGH STEWARD, AND THE PEERS;*

AGAINST

FRANCES, COUNTESS OF SOMERSET,

CONCERNING THE POISONING OF SIR THOMAS OVERBURY.

IT MAY PLEASE YOUR GRACE, MY LORD HIGH STEWARD OF ENGLAND, AND YOU, MY LORDS, THE PEERS:

I AM very glad to hear this unfortunate lady doth take this course, to confess fully and freely, and thereby to give glory to God and to justice. It is, as I may term it, the nobleness of an offender to confess: and, therefore, those meaner persons, upon whom justice passed before, confessed not; she doth. I know your lordships cannot behold her without compassion: many things may move you, her youth, her person, her sex, her noble family; yea, her provocations, if I should enter into the cause itself, and furies about her; but chiefly her penitency and confession.

* The Lord Chancellor Egerton, Lord Ellesmere, and Earl of Bridgwater.

But justice is the work of this day; the mercy-seat was in the inner part of the temple; the throne is public. But, since this lady hath, by her confession, prevented my evidence, and your verdict, and that this day's labour is eased; there resteth, in the legal proceeding, but for me to pray that her confession may be recorded, and judgment thereupon.

But, because your lordships the peers are met, and that this day and to-morrow are the days that crown all the former justice; and that in these great cases it hath been ever the manner to respect honour and satisfaction, as well as the ordinary parts and forms of justice; the occasion itself admonisheth me to give your lordships and the hearers this contentment, as to make declaration of the proceedings of this excellent work of the king's justice, from the beginning to the end.

It may please your grace, my Lord High Steward of England: this is now the second time, within the space of thirteen years' reign of our happy sovereign, that this high tribunal-seat, ordained for the trial of peers, hath been opened and erected, and that with a rare event, supplied and exercised by one and the same person, which is a great honour unto you, my lord steward.

In all this mean time the king hath reigned in his white robe, not sprinkled with any one drop of the blood of any of his nobles of this kingdom. Nay, such have been the depths of his mercy, as even those noblemen's bloods, against whom the proceeding was at Winchester, Cobham and Grey, were attainted and corrupted, but not spilt or taken away; but that they remained rather spectacles of justice in their continual imprisonment, than monuments of justice in the memory of their suffering.

It is true that the objects of his justice then, and now, were very differing: for then it was the revenge of an offence against his own person and crown, and upon persons that were malcontents, and contraries to the state and government; but now it is the revenge of the blood and death of a particular subject, and the cry of a prisoner: it is upon persons that were highly in his favour; whereby his majesty, to his great honour, hath showed to the world, as if it were written in a sunbeam, that he is truly the lieutenant of Him with whom there is no respect of persons; that his affections royal are above his affections private; that his favours and nearness about him are not like popish sanctuaries, to privilege malefactors; and that his being the best master in the world, doth not let him from being the best king in the world. His people, on the other side, may say to themselves, I will lie down in peace, for God, the king, and the law, protect me against great and small. It may be a discipline also to great men, especially such as are swoln in their fortunes from small beginnings, that the king is as well able to level mountains, as to fill valleys, if such be their desert.

But to come to the present case: The great frame of justice, my lords, in this present action, hath a vault, and hath a stage; a vault, wherein these works of darkness were contrived; and a stage, with steps, by which it was brought to light.

For the former of these, I will not lead your lordships into it, because I will engrieve nothing against a penitent; neither will I open any thing against him that is absent. The one I will give to the laws of humanity, and the other to the laws of justice: for I shall always serve my master with a good and sincere conscience, and, I know, that he accepteth best. Therefore, I will reserve that till to-morrow, and hold myself to that which I called the stage or theatre, whereunto indeed it may be fitly compared: for that things were first contained within the invisible judgments of God, as within a curtain, and after came forth, and were acted most worthily by the king, and right well by his ministers.

Sir Thomas Overbury was murdered by poison, September 15, 1613. This foul and cruel murder did for a time cry secretly in the ears of God; but God gave no answer to it, otherwise than by that voice, which sometimes he useth, which is "vox populi," the speech of the people: for there went then a murmur that Overbury was poisoned; and yet the same submiss and low voice of God, the speech of the vulgar people, was not without a counter-tenor or counter-blast of the devil, who is the common author both of murder and slander; for it was given out that Overbury was dead of a foul disease; and his body, which they had made "corpus Judaicum" with their poisons, so as it had no whole part, must be said to be leprosed with vice, and so his name poisoned as well as his body. For as to dissoluteness, I have not heard the gentleman noted with it; his faults were of insolency, turbulency, and the like of that kind.

Mean time there was some industry used, of which I will not now speak, to lull asleep those that were the revengers of the blood, the father and the brother of the murdered. And in these terms things stood by the space of two years, during which time, God did so blind the two great procurers, and dazzle them with their greatness; and blind, and nail fast the actors and instruments with security upon their protection, as neither the one looked about them, nor the other stirred or fled, or were conveyed away, but remained here still, as under a privy arrest of God's judgments; insomuch as Franklin, that should have been sent over to the Palsgrave with good store of money, was, by God's providence, and the accident of a marriage of his, diverted and stayed.

But about the beginning of the progress the last summer, God's judgments began to come out of their depths. And, as the revealing of murder is commonly such as a man said, "a Domino hoc factum est; it is God's work, and it is marvellous in our eyes:" so in this particular it was most admirable; for it came forth first by a compliment, a matter of courtesy. My Lord of Shrewsbury, that is now with God, recommended to a counsellor of state, of special trust by his place, the late lieutenant Helwisse,* only for acquaintance, as an honest and worthy gentleman, and desired him to know him, and to be acquainted with him. That counsellor answered him civilly, that my lord did him a favour, and that he should embrace it willingly; but he must let his lordship know, that there did lie a heavy imputation upon that gentleman, Helwisse; for that Sir Thomas Overbury, his prisoner, was thought to have come to a violent and an untimely death. When this speech was reported back by my Lord of Shrewsbury to Helwisse, "percussit illico animum," he was strucken with it: and being a politic man, and of likelihood doubting that the matter would break forth at one time or other, and that others might have the start of him, and thinking to make his own case by his own tale, resolved with himself upon this occasion to discover unto my Lord of Shrewsbury, and that counsellor, that there was an attempt, whereunto he was privy, to have poisoned Overbury by the hands of his under-keeper, Weston; but that he checked it, and put it by, and dissuaded it. But then he left it thus, that it was but as an attempt, or an untimely birth, never executed; and, as if his own fault had been no more, but that he was honest in forbidding, but fearful of revealing and impeaching, or accusing great persons: and so with this fine point thought to save himself.

But that counsellor of estate, wisely considering that, by the lieutenant's own tale, it could not be simply a permission or weakness: for that Weston was never displaced by the lieutenant, notwithstanding that attempt; and coupling the sequel by the beginning, thought it matter fit to be brought before his majesty, by whose appointment Helwisse set down the like declaration in writing.

Upon this ground the king playeth Solomon's part, "Gloria Dei celare rem, et gloria Regis investigare rem," and sets down certain papers of his own hand, which I might term to be "claves justitiæ," keys of justice; and may serve both for a precedent for princes to imitate, and for a direction for judges to follow. And his majesty carried the balance with a constant and steady hand, evenly, and without prejudice, whether it were a true accusation of the one part, or a practice and factious scandal of the other: which writing, because I am not able to express according to the worth thereof, I will desire your lordships anon to hear read.

This excellent foundation of justice being laid by his majesty's own hand, it was referred unto some counsellors to examine farther; who gained some degrees of light from Weston, but yet left it imperfect.

After it was referred to Sir Edward Coke, chief justice of the king's bench, as a person best practised in legal examinations; who took a great deal of indefatigable pains in it without intermission, having, as I have heard him say, taken at least three hundred examinations in this business.

But these things were not done in a corner; I need not speak of them. It is true that my lord chief justice, in the dawning and opening of the light, finding the matter touched upon these great persons, very discreetly became suitor to the king, to have greater persons than his own rank joined with him; whereupon your lordships, my Lord High Steward of England, my Lord Steward of the King's House, and my Lord Zouch, were joined with him.

Neither wanted there, this while, practice to suppress testimony, to deface writings, to weaken the king's resolution, to slander the justice, and the like. Nay, when it came to the first solemn act of justice, which was the arraignment of Weston, he had his lesson to stand mute, which had arrested the whole wheel of justice, but this dumb devil, by the means of some discreet divines, and the potent charm of justice together, was cast out; neither did this poisonous adder stop his ear to these charms, but relented, and yielded to his trial.

Then followed the other proceedings of justice against the other offenders, Turner, Helwisse, Franklin.

But all these being but the organs and instruments of this fact, the actors, and not the authors, justice could not have been crowned without this last act against these great persons; else Weston's censure or prediction might have been verified, when he said, he hoped the small flies should not be caught, and the greater escape. Wherein the king, being in great straits between the defacing of his honour, and of his creature, hath, according as he used to do, chosen the better part, reserving always mercy to himself.

The time also of justice hath had its true motions. The time until this lady's deliverance was due unto honour, Christianity, and humanity, in respect of her great belly. The time since was due to another kind of deliverance too; which was, that some causes of estate which were in the womb might likewise be brought forth, not

* Called in Sir H. Wotton's Reliq. p. 413, Elvis. In Sir A. Welden's Court of King James, p. 107, Elwaies. In Aulic. Coquin. p. 141, Ellowaies. In Sir W. Dugdale's Baron. of England, tom. ii. p. 425, Elwayes. In Baker, p. 434, Yelvis.

for matter of justice, but for reason of state. Likewise this last procrastination of days had the like weighty grounds and causes.

But, my lords, where I speak of a stage, I doubt I hold you upon the stage too long. But, before I pray judgment, I pray your lordships to hear the king's papers read, that you may see how well the king was inspired, and how nobly he carried it, that innocency might not have so much as aspersion.

Frances, Countess of Somerset, hath been indicted and arraigned, as accessary before the fact, for the murder and impoisonment of Sir Thomas Overbury, and hath pleaded guilty, and confesseth the indictment: I pray judgment against the prisoner.

THE CHARGE

OF SIR FRANCIS BACON, KNIGHT,

HIS MAJESTY'S ATTORNEY-GENERAL,

BY WAY OF EVIDENCE,

BEFORE THE LORD HIGH STEWARD, AND THE PEERS,

AGAINST ROBERT, EARL OF SOMERSET

CONCERNING THE POISONING OF OVERBURY.

IT MAY PLEASE YOUR GRACE, MY LORD HIGH STEWARD OF ENGLAND, AND YOU, MY LORDS, THE PEERS:

You have here before you Robert, Earl of Somerset, to be tried for his life, concerning the procuring and consenting to the impoisonment of Sir Thomas Overbury, then the king's prisoner in the Tower of London, as an accessary before the fact.

I know your lordships cannot behold this nobleman, but you must remember his great favour with the king, and the great place that he hath had and borne, and must be sensible that he is yet of your number and body, a peer as you are; so that you cannot cut him off from your body but with grief; and, therefore, that you will expect from us, that give in the king's evidence, sound and sufficient matter of proof to satisfy your honours and consciences.

As for the manner of the evidence, the king our master, who among his other virtues excelleth in that virtue of the imperial throne, which is justice, hath given us in commandment that we should not expatiate, nor make invectives, but materially pursue the evidence, as it conduceth to the point in question; a matter that, though we are glad of so good a warrant, yet, we should have done of ourselves: for far be it from us, by any strains of wit or art, to seek to play prizes, or to blazon our names in blood, or to carry the day otherwise than upon just grounds. We shall carry the lantern of justice, which is the evidence, before your eyes upright, and to be able to save it from being put out with any winds of evasion or vain defences, that is our part; and within that we shall contain ourselves, not doubting at all, but that the evidence itself will carry such force as it shall need no vantage or aggravation.

My lords, the course which I will hold in delivering that which I shall say, for I love order, shall be this:

First, I will speak somewhat of the nature and greatness of the offence which is now to be tried; not to weigh down my lord with the greatness of it, but, contrariwise, to show that a great offence deserveth a great proof, and that the king, however he might esteem this gentleman heretofore, as the signet upon his finger, to use the Scripture phrase, yet in such case as this he was to put him off.

Secondly, I will use some few words touching the nature of the proofs, which in such a case are competent.

Thirdly, I will state the proofs.

Fourthly and lastly, I will produce the proofs, either out of examinations and matters in writing, or witnesses, "viva voce."

For the offence itself, it is of crimes, next unto high treason, the greatest; it is the foulest of felonies. And, take this offence with the circumstances, it hath three degrees or stages; that it is

murder; that it is murder by impoisonment; that it is murder committed upon the king's prisoner in the Tower: I might say, that it is murder under the colour of friendship; but this is a circumstance moral; I leave that to the evidence itself.

For murder, my lords, the first record of justice that was in the world, was a judgment upon a murderer, in the person of Adam's first-born, Cain; and though it was not punished by death, but with banishment and mark of ignominy, in respect of the primogeniture, or population of the world, or other points of God's secret decree, yet it was judged, and was, as it is said, the first record of justice. So it appeareth likewise in Scripture, that the murder of Abner by Joab, though it were by David respited in respect of great services past, or reason of state, yet, it was not forgotten. But of this I will say no more. It was ever admitted, and ranked in God's own tables, that murder is, of offences between man and man, next unto treason and disobedience unto authority, which some divines have referred to the first table, because of the lieutenancy of God in princes.

For impoisonment, I am sorry it should be heard of in this kingdom: it is not "nostri generis nec sanguinis:" it is an Italian crime, fit for the court of Rome, where that person, which intoxicateth the kings of the earth with his cup of poison, is many times really and materially intoxicated and impoisoned himself.

But it hath three circumstances, which make it grievous beyond other murders: whereof the first is, that it takes away a man in full peace, in God's and the king's peace; he thinketh no harm, but is comforting of nature with refection and food; so that, as the Scripture saith, "his table is made a snare."

The second is, that it is easily committed, and easily concealed; and, on the other side, hardly prevented, and hardly discovered: for murder by violence, princes have guards, and private men have houses, attendants, and arms: neither can such murder be committed but "cum sonitu," and with some overt and apparent act that may discover and trace the offender. But, as for poison, the cup itself of princes will scarce serve, in regard of many poisons that neither discolour nor distaste.

And the last is, because it concerneth not only the destruction of the maliced man, but of any other; "Quis modo tutus erit?" for many times the poison is prepared for one, and is taken by another: so that men die other men's deaths; "considit infelix alieno vulnere:" and it is, as the psalm calleth it, "sagitta nocte volans;" the arrow that flieth by night, it hath no aim or certainty.

Now, for the third degree of this particular offence, which is, that it was committed upon the king's prisoner, who was out of his own defence, and merely in the king's protection, and for whom the king and state was a kind of respondent; is a thing that aggravates the fault much. For, certainly, my Lord of Somerset, let me tell you this, that Sir Thomas Overbury is the first man that was murdered in the Tower of London, since the murder of the two young princes. Thus much of the offence, now to the proof.

For the nature of the proofs, your lordships must consider, that impoisonment of all offences is the most secret; so secret, as that if, in all cases of impoisonment, you should require testimony, you were as good proclaim impunity.

Who could have impeached Livia, by testimony, of the impoisoning figs upon the tree, which her husband was wont to gather with his own hands.

Who could have impeached Parisatis for the poisoning of one side of the knife that she carved with, and keeping the other side clean; so that herself did eat of the same piece of meat that the lady did that she did impoison? The cases are infinite, and need not to be spoken of, of the secrecy of impoisonments; but wise triers must take upon them, in these secret cases, Solomon's spirit, that, where there could be no witnesses, collected the act by the affection.

But, yet, we are not to come to one case; for that which your lordships are to try, is not the act of impoisonment, for that is done to your hand; all the world by law is concluded to say, that Overbury was impoisoned by Weston.

But the question before you is of the procurement only, and of the abetting, as the law termeth it, as accessary before the fact: which abetting is no more but to do or use any act or means, which may aid or conduce unto the impoisonment.

So that it is not the buying or making of the poison, or the preparing, or confecting, or commixing of it, or the giving, or sending, or laying the poison, that are the only acts that do amount unto abetment. But, if there be any other act or means done or used to give the opportunity of impoisonment, or to facilitate the execution of it, or to stop or divert any impediments that might hinder it, and this be with an intention to accomplish and achieve the impoisonment; all these are abetments, and accessaries before the fact. I will put you a familiar example. Allow there be a conspiracy to murder a man as he journeys by the way, and it be one man's part to draw him forth to that journey by invitation, or by colour of some business; and another takes upon him to dissuade some friend of his, whom he had a purpose to take in his company, that he be not too strong to make his defence; and another hath the part to go along with him, and to hold him in

talk till the first blow be given: all these, my lords, without scruple, are abettors to this murder, though none of them give the blow, nor assist to give the blow.

My lords, he is not the hunter alone that lets slip the dog upon the deer, but he that lodges the deer, or raises him, or puts him out, or he that sets a toil that he cannot escape, or the like.

But this, my lords, little needeth in this present case, where there is such a chain of acts of impoisonment as hath been seldom seen, and could hardly have been expected, but that greatness of fortune maketh commonly grossness in offending.

To descend to the proofs themselves, I shall keep this course:

First, I will make a narrative or declaration of the fact itself.

Secondly, I will break and distribute the proofs as they concern the prisoner.

And, thirdly, according to that distribution, I will produce them, and read them, or use them.

So that there is nothing that I shall say, but your lordship, my Lord of Somerset, shall have three thoughts or cogitations to answer it: First, when I open it, you may take your aim. Secondly, when I distribute it, you may prepare your answers without confusion. And, lastly, when I produce the witnesses or examinations themselves, you may again ruminate and re-advise how to make your defence. And this I do the rather, because your memory or understanding may not be oppressed or overladen with the length of evidence, or with confusion of order. Nay, more, when your lordship shall make your answers in your time, I will put you in mind, when cause shall be, of your omissions.

First, therefore, for the simple narrative of the fact. Sir Thomas Overbury for a time was known to have had great interest and great friendship with my Lord of Somerset, both in his meaner fortunes, and after; insomuch as he was a kind of oracle of direction unto him; and, if you will believe his own vaunts, being of an insolent Thrasonical disposition, he took upon him, that the fortune, reputation, and understanding of this gentleman, who is well known to have had a better teacher, proceeded from his company and counsel.

And this friendship rested not only in conversation and business of court, but likewise in communication of secrets of estate. For my Lord of Somerset, at that time exercising, by his majesty's special favour and trust, the office of the secretary provisionally, did not forbear to acquaint Overbury with the king's packets of despatches from all parts, Spain, France, the Low Countries, &c. And this not by glimpses, or now and then rounding in the ear for a favour, but in a settled manner: packets were sent, sometimes opened by my lord, sometimes unbroken, unto Overbury, who perused them, copied, registered them, made tables of them as he thought good: so that, I will undertake, the time was when Overbury knew more of the secrets of state than the council-table did. Nay, they were grown to such an inwardness, as they made a play of all the world besides themselves: so as they had ciphers and jargons for the king, the queen, and all the great men; things seldom used, but either by princes and their ambassadors and ministers, or by such as work and practise against, or at least upon, princes.

But, understand me, my lord, I shall not charge you this day with any disloyalty; only I say this for a foundation, that there was a great communication of secrets between you and Overbury, and that it had relation to matters of estate, and the greatest causes of this kingdom.

But, my lords, as it is a principle in nature, that the best things are in their corruption the worst, and the sweetest wine makes the sharpest vinegar; so fell it out with them, that this excess, as I may term it, of friendship, ended in mortal hatred on my Lord of Somerset's part.

For it fell out, some twelve months before Overbury's imprisonment in the Tower, that my Lord of Somerset was entered into an unlawful love towards his unfortunate lady, then Countess of Essex: which went so far, as it was then secretly projected, chiefly between my Lord Privy Seal and my Lord of Somerset, to effect a nullity in the marriage with my Lord of Essex, and so to proceed to a marriage with Somerset.

This marriage and purpose did Overbury mainly oppugn, under pretence to do the true part of a friend, for that he counted her an unworthy woman; but the truth was, that Overbury, who, to speak plainly, had little that was solid for religion or moral virtue, but was a man possessed with ambition and vainglory, was loath to have any partners in the favour of my Lord of Somerset, and especially not the house of the Howards, against whom he had always professed hatred and opposition; so all was but miserable bargains of ambition.

And, my lords, that this is no sinister construction, will well appear unto you, when you shall hear that Overbury makes his brags to my Lord of Somerset, that he had won him the love of the lady by his letters and industry: so far was he from cases of conscience in this matter. And, certainly, my lords, howsoever the tragical misery of that poor gentleman, Overbury, ought somewhat to obliterate his faults; yet, because we are not now upon point of civility, but to discover the face of truth to the face of justice; and that it is material to the true understanding of the state of this cause; Overbury was naught and corrupt, the ballads must be amended for that point.

But, to proceed; when Overbury saw that he was like to be dispossessed of my lord here, whom

he had possessed so long, and by whose greatness he had promised himself to do wonders; and being a man of an unbounded and impetuous spirit, he began not only to dissuade, but to deter him from that love and marriage; and finding him fixed, thought to try stronger remedies, supposing that he had my lord's head under his girdle, in respect of communication of secrets of estate, or, as he calls them himself in his letters, secrets of all natures; and therefore dealt violently with him, to make him desist, with menaces of discovery of secrets, and the like.

Hereupon grew two streams of hatred upon Overbury; the one, from the lady, in respect that he crossed her love, and abused her name, which are furies to women; the other, of a deeper and more mineral nature, from my Lord of Somerset himself; who was afraid of Overbury's nature, and that, if he did break from him and fly out, he would mine into him, and trouble his whole fortunes.

I might add a third stream from the Earl of Northampton's ambition, who desires to be first in favour with my Lord of Somerset; and knowing Overbury's malice to himself and his house, thought that man must be removed and cut off. So it was amongst them resolved and decreed that Overbury must die.

Hereupon they had variety of devices. To send him beyond sea, upon occasion of employment, that was too weak; and they were so far from giving way to it, as they crossed it. There rested but two ways, quarrel or assault, and poison. For that of assault, after some proposition and attempt, they passed from it; it was a thing too open, and subject to more variety of chances. That of poison likewise was a hazardous thing, and subject to many preventions and cautions; especially to such a jealous and working brain as Overbury had, except he were first fast in their hands.

Therefore, the way was first to get him into a trap, and lay him up, and then they could not miss the mark. Therefore, in execution of this plot, it was devised, that Overbury should be designed to some honourable employment in foreign parts, and should underhand by the Lord of Somerset be encouraged to refuse it; and so upon that contempt he should be laid prisoner in the Tower, and then they would look he should be close enough, and death should be his bail. Yet were they not at their end. For they considered that if there was not a fit lieutenant of the Tower for their purpose, and likewise a fit under-keeper of Overbury; first, they should meet with many impediments in the giving and exhibiting the poison. Secondly, they should be exposed to note and observation that might discover them. And, thirdly, Overbury in the mean time might write clamorous and furious letters to other his friends, and so all might be disappointed. And, therefore, the next link of the chain was to displace the then lieutenant, Waade, and to place Helwisse, a principal abettor in the impoisonment: again, to displace Cary, that was the under-keeper in Waade's time, and to place Weston, who was the principal actor in the impoisonment: and this was done in such a while, that it may appear to be done, as it were, with one breath, as there were but fifteen days between the commitment of Overbury, the displacing of Waade, the placing of Helwisse, the displacing of Cary, the under-keeper, the placing of Weston, and the first poison, given two days after.

Then, when they had this poor gentleman in the Tower, close prisoner, where he could not escape nor stir, where he could not feed but by their hands, where he could not speak nor write but through their trunks; then was the time to execute the last act of this tragedy.

Then must Franklin be purveyor of the poisons, and procure five, six, seven several potions, to be sure to hit his complexion. Then must Mrs. Turner be the say-mistress of the poisons, to try upon poor beasts, what is present, and what works at distance of time. Then must Weston be the tormentor, and chase him with poison after poison; poison in salts, poison in meats, poison in sweatmeats, poison in medicines and vomits, until at last his body was almost come, by use of poisons, to the state that Mithridates's body was by the use of treacle and preservatives, that the force of the poisons were blunted upon him: Weston confessing, when he was chid for not despatching him, that he had given him enough to poison twenty men. Lastly, because all this asked time, courses were taken by Somerset, both to divert all means of Overbury's delivery, and to entertain Overbury by continual letters, and partly of hopes and projects for his delivery, and partly of other fables and negotiation; somewhat like some kind of persons, which I will not name, which keep men in talk of fortunetelling, when they have a felonious meaning.

And this is the true narrative of this act of impoisonment, which I have summarily recited.

Now, for the distribution of the proofs, there are four heads of proofs to prove you guilty, my Lord of Somerset, of this impoisonment; whereof two are precedent to the imprisonment, the third is present, and the fourth is following or subsequent. For it is in proofs as it is in lights, there is a direct light, and there is a reflexion of light, or back light.

The first head or proof thereof is, That there was a root of bitterness, a mortal malice or hatred, mixed with deep and bottomless fears, that you had towards Sir Thomas Overbury.

The second is, That you were the principal actor, and had your hands in all those acts, which did conduce to the impoisonment, and which gave opportunity and means to effect it;

and without which the impoisonment could never have been, and which could serve or tend to no other end but to the impoisonment.

The third is, That your hand was in the very impoisonment itself, which is more than needs to be proved; that you did direct poison; that you did deliver poison; that you did continually hearken to the success of the impoisonment; and that you spurred it on, and called for despatch when you thought it lingered.

And, lastly, That you did all the things after the impoisonment, which may detect a guilty conscience, for the smothering of it, and avoiding punishment for it: which can be but of three kinds; That you suppressed, as much as in you was, testimony: That you did deface, and destroy, and clip, and misdate all writings that might give light to the impoisonment; and that you did fly to the altar of guiltiness, which is a pardon, and a pardon of murder, and a pardon for yourself, and not for your lady.

In this, my lord, I convert my speech to you, because I would have you attend the points of your charge, and so of your defence the better. And two of these heads I have taken to myself, and left the other two to the king's two serjeants.

For the first main part, which is the mortal hatred, coupled with fear, that was in my Lord of Somerset towards Overbury, although he did palliate it with a great deal of hypocrisy and dissimulation, even to the end; I shall prove it, my lord steward, and you, my lords and peers, manifestly, by matter both of oath and writing. The root of this hatred was that that hath cost many a man's life, that is, fear of discovering secrets: secrets, I say, of a high and dangerous nature: Wherein the course that I will hold, shall be this:

First, I will show that such a breach and malice was between my lord and Overbury, and that it burst forth into violent menaces and threats on both sides.

Secondly, That these secrets were not light, but of a high nature; for I will give you the elevation of the pole. They were such as my Lord of Somerset for his part had made a vow, that Overbury should neither live in court nor country. That he had likewise opened himself and his own fears so far, that if Overbury ever came forth of the Tower, either Overbury or himself must die for it. And of Overbury's part, he had threatened my lord, that whether he did live or die, my lord's shame should never die, but he would leave him the most odious man of the world. And, farther, that my lord was like enough to repent it, in the place where Overbury wrote, which was the Tower of London. He was a true prophet in that: so here is the height of the secrets.

Thirdly, I will show you, that all the king's business was by my lord put into Overbury's hands; so as there is work enough for secrets, whatsoever they were: and, like princes' confederates, they had their ciphers and jargons.

And, lastly, I will show you that it is but a toy to say that the malice was only in respect he spake dishonourably of the lady; or for doubt of breaking the marriage: for that Overbury was a coadjutor to that love, and the Lord of Somerset was as deep in speaking ill of the lady as Overbury. And, again, it was too late for that matter, for the bargain of the match was then made and past. And if it had been no more but to remove Overbury from disturbing of the match, it had been an easy matter to have banded over Overbury beyond seas, for which they had a fair way; but that would not serve their turn.

And, lastly, "periculum periculo vincitur," to go so far as an impoisonment, must have a deeper malice than flashes: for the cause must bear a proportion to the effect.

For the next general head of proofs, which consists in acts preparatory to the middle acts, they are in eight several points of the compass, as I may term it.

First, That there were devices and projects to despatch Overbury, or to overthrow him, plotted between the Countess of Somerset, the Earl of Somerset, and the Earl of Northampton, before they fell upon the impoisonment: for always before men fix upon a course of mischief, there be some rejections: but die he must, one way or other.

Secondly, That my Lord of Somerset was a principal practiser, I must speak it, in a most perfidious manner, to set a train or trap for Overbury, to get him into the Tower; without which they never durst have attempted the impoisonment.

Thirdly, That the placing of the lieutenant Helwisse, one of the impoisoners, and the displacing of Waade, was by the means of my Lord of Somerset.

Fourthly, That the placing of Weston, the under-keeper, who was the principal impoisoner, and the displacing of Cary, and the doing of all this within fifteen days after Overbury's commitment, was by the means and countenance of my Lord of Somerset. And these two were the active instruments of the impoisonment: and this was a business that the lady's power could not reach unto.

Fifthly, That, because there must be a time for the tragedy to be acted, and chiefly because they would not have the poisons work upon the sudden: and for that the strength of Overbury's nature, or the very custom of receiving poison into his body, did overcome the poisons, that they wrought not so fast; therefore Overbury must be held in the Tower. And as my Lord of Somerset got him into the trap, so he kept him in, and abused him with continual hopes of liberty; and diverted all the true and effectual means of his liberty, and made light of his sickness and extremities.

Sixthly, That not only the plot of getting Overbury into the Tower, and the devices to hold him and keep him there; but the strange manner of his close keeping, being in but for a contempt, was by the device and means of my Lord of Somerset, who denied his father to see him, denied his servants that offered to be shut up close prisoners with him; and in effect handled it so, that he was close prisoner to all his friends, and open and exposed to all his enemies.

Seventhly, That the advertisements which my lady received from time to time from the lieutenant or Weston, touching Overbury's state of body or health, were ever sent up to the court, though it were in progress, and that from my lady: such a thirst and listening this lord had to hear that he was despatched.

Lastly, There was a continual negotiation to set Overbury's head on work, that he should make some recognition to clear the honour of the lady; and that he should become a good instrument towards her and her friends: all which was but entertainment; for your lordships shall plainly see divers of my Lord of Northampton's letters, whose hand was deep in this business, written, I must say it, in dark words and clauses; that there was one thing pretended and another intended; that there was a real charge, and there was somewhat not real; a main drift, and a dissimulation. Nay, farther, there be some passages which the peers in their wisdom will discern to point directly at the impoisonment.

[After this inducement followed the evidence itself.]

TO HIS MAJESTY, ABOUT THE EARL OF SOMERSET.

IT MAY PLEASE YOUR MOST EXCELLENT MAJESTY,

At my last access to your majesty, it was fit for me to consider the time and your journey, which maketh me now trouble your majesty with a remnant of that I thought then to have said: besides your old warrant and commission to me, to advertise your majesty when you are "aux champs," of any thing that concerned your service, and my place. I know your majesty is "nunquam minus solus, quam cum solus;" and I confess, in regard of your great judgment, under which nothing ought to be presented but well weighed, I could almost wish that the manner of Tiberius were in use again, of whom Tacitus saith, "Mos erat quamvis præsentem scripto adire;" much more in absence. I said to your majesty that which I do now repeat, that the evidence upon which my Lord of Somerset standeth indicted, is of a good strong thread, considering impoisoning is the darkest of offences; but that the thread must be well spun and woven together; for, your majesty knoweth, it is one thing to deal with a jury of Middlesex and Londoners, and another to deal with the peers; whose objects, perhaps, will not be so much what is before them in the present case, which I think is as odious to them as to the vulgar, but what may be hereafter. Besides, there be two disadvantages, we that shall give in evidence shall meet with, somewhat considerable; the one, that the same things often opened, lose their freshness, except there be an aspersion of somewhat that is new; the other is, the expectation raised, which makes things seem less than they are, because they are less than opinion. Therefore, I were not your attorney, nor myself, if I should not be very careful, that in this last part, which is the pinnacle of your former justice, all things may pass "sine offendiculo, sine scrupulo." Hereupon I did move two things, which, having now more fully explained myself, I do, in all humbleness, renew. First, that your majesty will be careful to choose a steward of judgment, that may be able to moderate the evidence, and cut off digressions; for I may interrupt, but I cannot silence: the other, that there may be special care taken for the ordering the evidence, not only for the knitting, but for the list, and, to use your majesty's own words, the confining of it. This to do, if your majesty vouchsafe to direct it yourself, that is the best; if not, I humbly pray you to require my lord chancellor, that he, together with my lord chief justice, will confer with myself, and my fellows, that shall be used for the marshalling and bounding of the evidence, that we may have the help of his opinion, as well as that of my lord chief justice; whose great travels, as I much commend, yet that same "plerophoria," or over-confidence, doth always subject things to a great deal of chance.

There is another business proper for me to crave of your majesty at this time, as one that have, in my eye, a great deal of service to be done concerning your casual revenue; but considering times and persons, I desire to be strengthened by some such form of commandment under your royal hand, as I send you here enclosed. I most humbly pray your majesty to think, I understand myself right well in this which I desire, and that it tendeth greatly to the good of your service. The warrant I mean not to impart, but upon just occasion; thus, thirsty to hear of your majesty's good health, I rest———

22 Jan. 1615.

TO SIR GEORGE VILLIERS, ABOUT THE EARL OF SOMERSET.

SIR,

I thought it convenient to give his majesty an account of that which his majesty gave me in charge in general, reserving the particulars for his coming; and I find it necessary to know his pleasure in some things ere I could farther proceed.

My lord chancellor and myself spent Thursday and yesterday, the whole forenoons of both days, in the examination of Sir Robert Cotton; whom we find hitherto but empty, save only in the great point of the treaty with Spain.

This examination was taken before his majesty's warrant came to Mr. Vice-Chamberlain, for communicating unto us the secrets of the pensions; which warrant I received yesterday morning, being Friday, and a meeting was appointed at my lord chancellor's in the evening, after council; upon which conference we find matter of farther examination for Sir Robert Cotton, of some new articles whereupon to examine Somerset, and of entering into examination of Sir William Mounson.

Wherefore, first for Somerset, being now ready to proceed to examine him, we stay only upon the Duke of Lenox, who it seemeth is fallen sick and keepeth in; without whom, we neither think it warranted by his majesty's direction, nor agreeable to his intention, that we should proceed; for that will want, which should sweeten the cup of medicine, he being his countryman and friend. Herein, then, we humbly crave his majesty's direction with all convenient speed, whether we shall expect the duke's recovery, or proceed by ourselves; or that his majesty will think of some other person, qualified, according to his majesty's just intention, to be joined with us. I remember we had speech with his majesty of my Lord Hay; and I, for my part, can think of no other, except it should be my Lord Chancellor of Scotland, for my Lord Binning may be thought too near allied.

I am farther to know his majesty's pleasure concerning the day; for my lord chancellor and I conceived his majesty to have designed the Monday and Tuesday after St. George's feast; and, nevertheless, we conceived also, that his majesty understood that the examinations of Somerset about this, and otherwise touching the Spanish practices, should first be put to a point; which will not be possible, as time cometh on, by reason of this accident of the duke's sickness, and the cause we find of Sir William Mounson's examination, and that divers of the peers are to be sent for from remote places.

It may please his majesty, therefore, to take into consideration, whether the days may not well be put off till Wednesday and Thursday after the term, which endeth on the Monday, being the Wednesday and Thursday before Whitsuntide; or, if that please not his majesty, in respect, it may be, his majesty will be then in town, whereas these arraignments have been still in his majesty's absence from town, then to take Monday and Tuesday after Trinity Sunday, being the Monday and Tuesday before Trinity term.

Now, for Sir William Mounson, if it be his majesty's pleasure that my lord chancellor and I shall proceed to the examination of him, for that of the Duke of Lenox differs, in that there is not the like cause as in that of Somerset, then his majesty may be pleased to direct his commandment and warrant to my lord chief justice, to deliver unto me the examination he took of Sir William Mounson, that those, joined to the information which we have received from Mr. Vice-Chamberlain, may be full instructions unto us for his examination. Farther, I pray let his majesty know, that on Thursday in the evening, my lord chief justice and myself attended my lord chancellor at his house, for the settling that scruple which his majesty most justly conceived in the examination of the Lady Somerset; at which time, resting on his majesty's opinion, that that evidence, as it standeth now uncleared, must, "secundum leges sanæ conscientiæ" be laid aside; the question was, whether we should leave it out, or try what a re-examination of my Lady Somerset would produce? Whereupon we agreed upon a re-examination of my Lady Somerset, which my lord chief justice and I have appointed for Monday morning. I was bold at that meeting to put my lord chief justice a posing question; which was, Whether that opinion which his brethren had given upon the whole evidence, and he had reported to his majesty, namely, that it was good evidence, in their opinions, to convict my Lord of Somerset, was not grounded upon this part of the evidence now to be omitted, as well as upon the rest: who answered positively, No; and they never saw the exposition of the letter, but the letter only.

The same Thursday evening, before we entered into this last matter, and in the presence of Mr. Secretary Winwood, who left us when we went to the former business, we had conference concerning the frauds and abusive grants passed to the prejudice of his majesty's state of revenue; where my lord chief justice made some relation of his collections which he had made of that kind; of which I will only say this, that I heard nothing that was new to me, and I found my lord chancellor, in divers particulars, more ready than I had found him. We grew to a distribution both of times and of matters, for we agreed what to begin with presently, and what should follow, and also we had consideration what was to be holpen by law, what by equity, and what by parliament; wherein I must confess, that in the last of these, of which my lord chief justice made most account, I make most doubt. But the conclusion was, that, upon this entrance, I should advise and confer at large with my lord chief justice, and set things in work. The particulars I refer till his majesty's coming.

The learned counsel have now attended me twice at my chamber, to confer upon that which his majesty gave us in commandment for our opi-

nion upon the case set down by my lord chancellor, whether the statutes extend to it or no; wherein we are more and more edified and confirmed that they do not, and shall shortly send our report to his majesty.

Sir, I hope you will bear me witness I have not been idle; but all is nothing to the duty I owe his majesty for his singular favours past and present; supplying all with love and prayers, I rest,

Your true friend and devoted servant,
FR. BACON.

April 13, 1616.

TO SIR GEORGE VILLIERS, ABOUT THE EARL OF SOMERSET.

SIR,

I received from you a letter of very brief and clear directions; and I think it a great blessing of God upon me and my labours, that my directions come by so clear a conduit, as they receive no tincture in the passage.

Yesterday my lord chancellor, the Duke of Lenox, and myself, spent the whole afternoon at the Tower, in the examination of Somerset, upon the articles sent from his majesty, and some other additionals, which were in effect contained in the former, but extended to more particularity, by occasion of somewhat discovered by Cotton's examination, and Mr. Vice-Chamberlain's information.

He is full of protestations, and would fain keep that quarter toward Spain clear; using but this for argument, that he had such fortunes from his majesty, as he could not think of bettering his conditions from Spain, because, as he said, he was no military man. He cometh nothing so far on, for that which concerneth the treaty, as Cotton, which doth much aggravate suspicion against him; the farther particulars I reserve to his majesty's coming.

In the end, "tanquam obiter," but very effectually, my lord chancellor put him in mind of the state he stood in for the impoisonment; but he was little moved with it, and pretended carelessness of life, since ignominy had made him unfit for his majesty's service. I am of opinion that the fair usage of him, as it was fit for the Spanish examinations, and for the questions touching the papers and despatches, and all that, so it was no good preparative to make him descend into himself touching his present danger: and, therefore, my lord chancellor and myself thought not good to insist upon it at this time.

I have received from my lord chief justice the examination of Sir William Mounson; with whom we mean to proceed to farther examination with all speed.

My lord chief justice is altered touching the re-examination of the lady, and desired me that we might stay till he spake with his majesty, saying it could be no casting back to the business; which I did approve.

Myself, with the rest of my fellows, upon due and mature advice, perfected our report touching the chancery; for the receiving whereof, I pray you put his majesty in mind at his coming, to appoint some time for us to wait upon him altogether, for the delivery in of the same, as we did in our former certificate.

For the revenue matters, I reserve them to his majesty's coming; and in the mean time I doubt not but Mr. Secretary Winwood will make some kind of report thereof to his majesty.

For the conclusion of your letter concerning my own comfort, I can but say the psalm of "Quid retribuam?" God, that giveth me favour in his majesty's eyes, will strengthen me in his majesty's service. I ever rest

Your true and devoted servant,
FR. BACON.

April 18, 1616.

To requite your postscript of excuse for scribbling, I pray you excuse that the paper is not gilt, I writing from Westminster-Hall, where we are not so fine.

A LETTER TO THE KING, WITH HIS MAJESTY'S OBSERVATIONS UPON IT.

IT MAY PLEASE YOUR MOST EXCELLENT MAJESTY,

Your majesty hath put me upon a work of providence in this great cause, which is to break and distinguish future events into present cases; and so to present them to your royal judgment, that, in this action, which hath been carried with so great prudence, justice, and clemency, there may be, for that which remaineth, as little surprise as is possible; but that things duly foreseen may have their remedies and directions in readiness; wherein I cannot forget what the poet Martial saith; "O quantum est subitis casibus ingenium?" signifying, that accident is many times more subtle than foresight, and overreacheth expectation; and, besides, I know very well the meanness of my own judgment, in comprehending or forecasting what may follow.

It was your majesty's pleasure also, that I should couple the suppositions with my opinion in every of them, which is a harder task; but yet your majesty's commandment requireth my obedience, and your trust giveth me assurance.

I will put the case, which I wish; that Somerset should make a clear confession of his offences, before he be produced to trial.

In this case it seemeth your majesty will have a new consult; the points whereof will be, 1. Whether your majesty will stay the trial, and so save them both from the stage, and that public ignominy. 2. Or whether you will, or may fitly,

by law, have the trial proceed, and stay or reprieve the judgment, which saveth the lands from forfeiture, and the blood from corruption. 3. Or whether you will have both trial and judgment proceed, and save the blood only, not from corrupting, but from spilling.

These be the depths of your majesty's mercy, which I may not enter into: but for honour and reputation, they have these grounds:

That the blood of Overbury is already revenged by divers executions.

That confession and penitency are the footstools of mercy; adding this circumstance likewise, that the former offenders did none of them make a clear confession.

That the great downfall of so great persons carrieth in itself a heavy judgment, and a kind of civil death, although their lives should not be taken.

All which may satisfy honour for sparing their lives. But if your majesty's mercy should extend to the first degree, which is the highest, of sparing the stage and the trial; then three things are to be considered:

First, That they make such a submission or deprecation, as they prostrate themselves, and all that they have, at your majesty's feet, imploring your mercy.

Secondly, That your majesty, in your own wisdom, do advise what course you will take, for the utter extinguishing of all hopes of resuscitating of their fortunes and favour; whereof if there should be the least conceit, it will leave in men a great deal of envy and discontent.

And, lastly; Whether your majesty will not suffer it to be thought abroad, that there is cause of farther examination of Somerset, concerning matters of estate, after he shall begin once to be a confessant, and so make as well a politic ground, as a ground of clemency, for farther stay.

And for the second degree, of proceeding to trial, and staying judgment, I must better inform myself by precedents, and advise with my lord chancellor.

The second case is, if that fall out which is likest, as things stand, and which we expect, which is, that the lady confess; and that Somerset himself plead not guilty, and be found guilty:

In this case, first, I suppose your majesty will not think of any stay of judgment, but that the public process of justice pass on.

Secondly, For your mercy to be extended to both for pardon of their execution, I have partly touched in the considerations applied to the former case; whereunto may be added, that as there is ground of mercy for her, upon her penitency and free confession, and will be much more upon his finding guilty; because the malice on his part will be thought the deeper source of the offence; so there will be ground for mercy on his part, upon the nature of the proof; and because it rests chiefly upon presumptions. For certainly there may be an evidence so balanced, as it may have sufficient matter for the conscience of the peers to convict him, and yet leave sufficient matter in the conscience of a king upon the same evidence to pardon his life; because the peers are astringed by necessity either to acquit or condemn; but grace is free: and, for my part, I think the evidence in this present case will be of such a nature.

Thirdly, It shall be my care so to moderate the manner of charging him, as it might make him not odious beyond the extent of mercy.

Lastly, All these points of mercy and favour are to be understood with this limitation, if he do not, by his contemptuous and insolent carriage at the bar, make himself incapable and unworthy of them.

The third case is, if he should stand mute and will not plead, whereof, your majesty knoweth, there hath been some secret question.

In this case I should think fit, that, as in public, both myself, and chiefly my lord chancellor, sitting then as Lord Steward of England, should dehort and deter him from that desperation; so, nevertheless, that as much should be done for him, as was done for Weston; which was to adjourn the court for some days, upon a Christian ground, that he may have time to turn from that mind of destroying himself; during which time your majesty's farther pleasure may be known.

The fourth case is that which I should be very sorry it should happen, but it is a future contingent; that is, if the peers should acquit him, and find him not guilty.

In this case the lord steward must be provided what to do. For, as it hath been never seen, as I conceive it, that there should be any rejecting of the verdict, or any respiting of the judgment of the acquittal; so, on the other side, this case requireth, that because there be many high and heinous offences, though not capital, for which he may be questioned in the Star Chamber, or otherwise, that there be some touch of that in general at the conclusion, by my Lord Steward of England; and that, therefore, he be remanded to the Tower as close prisoner.

For the matter of examination, or other proceedings, my lord chancellor with my advice hath set down,

To-morrow, being Monday, for the re-examination of the lady:

Wednesday next, for the meeting of the judges concerning the evidence:

Thursday, for the examination of Somerset himself, according to your majesty's instructions:

Which three parts, when they shall be performed, I will give your majesty advertisement with speed, and in the mean time be glad to receive from your majesty, whom it is my part to inform truly, such directions or significations of your pleasure as this advertisement may induce,

and that with speed, because the time cometh on. Well remembering who is the person whom your majesty admitted to this secret, I have sent this letter open unto him, that he may take your majesty's times to report it, or show it unto you; assuring myself that nothing is more firm than his trust, tied to your majesty's commandments.

Your majesty's most humble
and most bounden subject and servant,
FR. BACON.

April 28, 1616.

TO SIR GEORGE VILLIERS, ABOUT THE EARL OF SOMERSET.

SIR,

I have received my letter from his majesty, with his marginal notes, which shall be my directions, being glad to perceive I understand his majesty so well. That same little charm, which may be secretly infused into Somerset's ear some few hours before his trial, was excellently well thought of by his majesty; and I do approve it both for matter and time; only, if it seem good to his majesty, I would wish it a little enlarged: for if it be no more than to spare his blood, he hath a kind of proud humour which may overwork the medicine. Therefore I could wish it were made a little stronger, by giving him some hopes that his majesty will be good to his lady and child; and that time, when justice and his majesty's honour is once saved and satisfied, may produce farther fruit of his majesty's compassion: which was to be seen in the example of Southampton, whom his majesty after attainder restored: and Cobham and Gray, to whom his majesty, notwithstanding they were offenders against his own person, yet he spared their lives; and for Gray, his majesty gave him back some part of his estate, and was upon point to deliver him much more. He having been so highly in his majesty's favour, may hope well, if he hurt not himself by his public misdemeanor.

For the person that should deliver this message, I am not so well seen in the region of his friends, as to be able to make choice of a particular; my lord treasurer, the Lord Knollys, or any of his nearest friends should not be trusted with it, for they may go too far, and perhaps work contrary to his majesty's ends. Those which occur to me are my Lord Hay, my Lord Burleigh, of England, I mean, and Sir Robert Carre.

My Lady Somerset hath been re-examined, and his majesty is found both a true prophet and a most just king in that scruple he made; for now she expoundeth the word He, that should send the tarts to Elwys's wife, to be of Overbury, and not of Somerset; but for the person that should bid her, she said it was Northampton or Weston, not pitching upon certainty, which giveth some advantage to the evidence.

Yesterday being Wednesday, I spent four or five hours with the judges whom his majesty designed to take consideration with, the four judges of the king's bench, of the evidence against Somerset: they all concur in opinion, that the questioning and drawing him on to trial is most honourable and just, and that the evidence is fair and good.

His majesty's letter to the judges concerning the "Commendams" was full of magnanimity and wisdom. I perceive his majesty is never less alone, than when he is alone; for I am sure there was nobody by him to inform him, which made me admire it the more.

The judges have given a day over, till the second Saturday of the next term; so as that matter may endure farther consideration, for his majesty not only not to lose ground, but to win ground.

To-morrow is appointed for the examination of Somerset, which, by some infirmity of the Duke of Lenox, was put off from this day. When this is done, I will write more fully, ever resting

Your true and devoted servant,
FR. BACON.

May 2, 1616.

TO SIR GEORGE VILLIERS, OF SOMERSET'S ARRAIGNMENT.

SIR,

I am far enough from opinion, that the redintegration or resuscitation of Somerset's fortune can ever stand with his majesty's honour and safety; and therein I think I expressed myself fully to his majesty in one of my former letters; and I know well any expectation or thought abroad will do much hurt. But yet the glimmering of that which the king hath done to others, by way of talk to him, cannot hurt, as I conceive; but I would not have that part of the message as from the king, but added by the messenger as from himself. This I remit to his majesty's princely judgment.

For the person, though he trust the lieutenant well, yet it must be some new man: for, in these cases, that which is ordinary worketh not so great impressions as that which is new and extraordinary.

The time I wish to be the Tuesday, being the even of his lady's arraignment; for, as his majesty first conceived, I would not have it stay in his stomach too long, lest it sour in the digestion; and to be too near the time, may be thought but to tune him for that day.

I send herewithal the substance of that which I purpose to say nakedly, and only in that part which is of tenderness; for that I conceive was his majesty's meaning.

It will be necessary, because I have distributed parts to the two serjeants, as that paper doth

express, and they understand nothing of his majesty's pleasure of the manner of carrying the evidence, more than they may guess by observation of my example, which they may ascribe as much to my nature, as to direction; therefore, that his majesty would be pleased to write some few words to us all, signed with his own hand, that, the matter itself being tragical enough, bitterness and insulting be forborne; and that we remember our part to be to make him delinquent to the peers, and not odious to the people. That part of the evidence of the lady's exposition of the pronoun, He, which was first caught hold of by me, and afterwards by his majesty's singular wisdom and conscience excepted to, and now is by her re-examination retracted, I have given order to Serjeant Montague, within whose part it falleth, to leave it out of the evidence. I do yet crave pardon, if I do not certify touching the point of law for respiting the judgment, for I have not fully advised with my lord chancellor concerning it, but I will advertise it in time.

I send his majesty the lord steward's commission in two several instruments, the one to remain with my lord chancellor, which is that which is written in secretary-hand for his warrant, and is to pass the signet; the other, that whereunto the great seal is to be affixed, which is in chancery-hand: his majesty is to sign them both, and to transmit the former to the signet, if the secretaries either of them be there; and both of them are to be returned to me with all speed. I ever rest

Your true and devoted servant,

May 5, 1616. FR. BACON.

TO THE KING, ABOUT SOMERSET'S EXAMINATION.

IT MAY PLEASE YOUR MAJESTY,

We have done our best endeavours to perform your majesty's commission, both in matter and manner, for the examination of my Lord of Somerset; wherein that which passed, for the general, was to this effect; That he was to know his own case, for that his day of trial could not be far off; but that this day's work was that which would conduce to your majesty's justice little or nothing, but to your mercy much, if he did lay hold upon it; and therefore might do him good, but could do him no hurt. For, as for your justice, there had been taken great and grave opinion, not only of such judges as he may think violent, but of the most sad and most temperate of the kingdom, who ought to understand the state of the proofs, that the evidence was full to convict him, so as there needeth neither confession, nor supply of examination. But for your majesty's mercy, although he were not to expect we should make any promise, we did assure him, that your majesty was compassionate of him if he gave you some ground whereon to work; that, as long as he stood upon his innocency and trial, your majesty was tied in honour to proceed according to justice; and, that he little understood, being a close prisoner, how much the expectation of the world, besides your love to justice itself, engaged your majesty, whatsoever your inclinations were: but, nevertheless, that a frank and clear confession might open the gate of mercy, and help to satisfy the point of honour.

That his lady, as he knew, and that after many oaths and imprecations to the contrary, had nevertheless, in the end, being touched with remorse, confessed; that she that led him to offend, might lead him likewise to repent of his offence: that the confession of one of them could not fitly do either of them much good, but the confession of both of them might work some farther effect towards both: and, therefore, in conclusion, we wished him not to shut the gate of your majesty's mercy against himself, by being obdurate any longer. This was the effect of that which was spoken, part by one of us, part by another, as it fell out; adding farther, that he might well discern who spake in us in the course we held; for that commissioners for examination might not presume so far of themselves.

Not to trouble your majesty with circumstances of his answers, the sequel was no other, but that we found him still not to come any degree farther on to confess; only his behaviour was very sober, and modest, and mild, differing apparently from other times, but yet, as it seemed, resolved to have his trial.

Then did we proceed to examine him upon divers questions touching the impoisonment, which indeed were very material and supplemental to the former evidence; wherein either his affirmatives gave some light, or his negatives do greatly falsify him in that which is apparently proved.

We made this farther observation; that when we asked him some question that did touch the prince or some foreign practice, which we did very sparingly at this time, yet he grew a little stirred; but in the questions of the impoisonment very cold and modest. Thus, not thinking it necessary to trouble your majesty with any farther particulars, we end with prayer to God ever to preserve your majesty.

Your majesty's most loyal and faithful servant,

FR. BACON.

Postscript. If it seem good unto your majesty, we think it not amiss some preacher, well chosen, had access to my Lord of Somerset for his preparing and comfort, although it be before his trial.

TO SIR GEORGE VILLIERS.

SIR,

I send you enclosed a warrant for my Lady of Somerset's pardon, reformed in that main and

material point, of inserting a clause [that she was not a principal, but an accessary before the fact, by the instigation of base persons.] Her friends think long to have it despatched, which I marvel not at, for that in matter of life moments are numbered.

I do more and more take contentment in his majesty's choice of Sir Oliver St. John, for his deputy of Ireland, finding, upon divers conferences with him, his great sufficiency; and I hope the good intelligence, which he purposeth to hold with me by advertisements from time to time, shall work a good effect for his majesty's service.

I am wonderful desirous to see that kingdom flourish, because it is the proper work and glory of his majesty and his times. And his majesty may be pleased to call to mind, that, a good while since, when the great rent and divisions were in the parliament of Ireland, I was no unfortunate remembrancer to his majesty's princely wisdom in that business. God ever keep you and prosper you.

Your true and most devoted and
bounden servant,
FR. BACON.

PAPERS

RELATING TO

THE EARL OF ESSEX.

THE APOLOGY

OF

SIR FRANCIS BACON,

IN CERTAIN

IMPUTATIONS CONCERNING THE LATE EARL OF ESSEX.

TO THE RIGHT HONOURABLE HIS VERY GOOD LORD,

THE EARL OF DEVONSHIRE, LORD LIEUTENANT OF IRELAND

It may please your good lordship, I cannot be ignorant, and ought to be sensible of the wrong which I sustain in common speech, as if I had been false or unthankful to that noble, but unfortunate earl, the Earl of Essex: and for satisfying the vulgar sort, I do not so much regard it; though I love a good name, but yet as a handmaid and attendant of honesty and virtue. For I am of his opinion that said pleasantly, "That it was a shame to him that was a suitor to the mistress, to make love to the waiting-woman;" and, therefore, to woo or court common fame, otherwise than it followeth on honest courses, I, for my part, find not myself fit or disposed. But, on the other side, there is no worldly thing that concerneth myself, which I hold more dear, than the good opinion of certain persons; among which, there is none I would more willingly give satisfaction unto, than to your lordship. First, because you loved my Lord of Essex, and, therefore, will not be partial towards me, which is part of that I desire: next, because it hath ever pleased you to show yourself to me an honourable friend, and so no baseness in me to seek to satisfy you: and, lastly, because I know your lordship is excellently grounded in the true rules and habits of duties and moralities, which must be they which shall decide this matter; wherein, my lord, my defence needeth to be but simple and brief; namely, that whatsoever I did concerning that action and proceeding, was done in my duty and service to the queen and the state; in which I would not show myself false-hearted, nor faint-hearted, for any man's sake living. For every honest man that hath his heart well planted, will forsake his king, rather than forsake God, and forsake his friend, rather than forsake his king; and, yet, will forsake any earthly commodity, yea, and his own life, in some cases, rather than forsake his friend. I hope the world hath not forgotten these degrees, else the heathen saying, "Amicus usque ad aras," shall judge them.

And if any man shall say, I did officiously intrude myself into that business, because I had no ordinary place; the like may be said of all the business, in effect, that passed the hands of the learned counsel, either of state or revenues, these many years, wherein I was continually used. For, as your lordship may remember, the queen knew her strength so well, as she looked her word should be a warrant; and, after the manner of the choicest princes before her, did not always tie her trust to place, but did sometime divide private favour from office. And I, for my part, though I was not so unseen in the world, but I knew the condition was subject to envy and peril; yet, because I knew again she was constant in her favours, and made an end where she began; and, especially, because she upheld me with extraordinary access, and other demonstrations

of confidence and grace, I resolved to endure it in expectation of better. But my scope and desire is, that your lordship would be pleased to have the honourable patience to know the truth, in some particularity, of all that passed in this cause, wherein I had any part; that you may perceive how honest a heart I ever bare to my sovereign, and to my country, and to that nobleman, who had so well deserved of me, and so well accepted of my deservings, whose fortune I cannot remember, without much grief. But, for any action of mine towards him, there is nothing that passed me in my lifetime, that cometh to my remembrance with more clearness, and less check of conscience: for it will appear to your lordship, that I was not only not opposite to my Lord of Essex, but that I did occupy the utmost of my wits, and adventure my fortune with the queen, to have reintegrated his, and so continued faithfully and industriously, till his last fatal impatience, for so I will call it, after which day there was not time to work for him; though the same, my affection, when it could not work on the subject proper, went to the next, with no ill effect towards some others, who, I think, do rather not know it, than not acknowledge it. And this I will assure your lordship, I will leave nothing untold, that is truth, for any enemy that I have to add; and, on the other side, I must reserve much which makes for me, in many respects of duty, which I esteem above my credit: and what I have here set down to your lordship, I protest, as I hope to have any part in God's favour, is true.

It is well known, how I did many years since dedicate my travels and studies to the use, and, as I may term it, service of my Lord of Essex, which, I protest before God, I did not, making election of him as the likeliest mean of mine own advancement, but out of the humour of a man, that ever from the time I had any use of reason, whether it were reading upon good books, or upon the example of a good father, or by nature, I loved my country more than was answerable to my fortune; and I held at that time my lord to be the fittest instrument to do good to the state, and therefore I applied myself to him in a manner which I think happeneth rarely among men: for I did not only labour carefully and industriously in that he set me about, whether it were matter of advice or otherwise, but, neglecting the queen's service, mine own fortune, and in a sort my vocation, I did nothing but advise and ruminate with myself, to the best of my understanding, propositions and memorials of any thing that might concern his lordship's honour, fortune, or service. And when, not long after I entered into this course, my brother, Mr. Anthony Bacon, came from beyond the seas, being a gentleman whose ability the world taketh knowledge of for matters of state, especially foreign, I did likewise knit his service to be at my lord's disposing. And, on the other side, I must and will ever acknowledge my lord's love, trust, and favour towards me; and last of all his liberality, having in feoffed me of land which I sold for eighteen hundred pounds to Mr. Reynold Nicholas, which, I think, was more worth; and that at such a time, and with so kind and noble circumstances, as the manner was as much as the matter; which, though it be but an idle digression, yet, because I am not willing to be short in commemoration of his benefits, I will presume to trouble your lordship with relating to you the manner of it. After the queen had denied me the solicitor's place, for the which his lordship had been a long and earnest suitor on my behalf, it pleased him to come to me from Richmond to Twickenham Park, and brake with me, and said: "Mr. Bacon, the queen hath denied me the place for you, and hath placed another; I know you are the least part of your own matter, but you fare ill because you have chosen me for your mean and dependence; you have spent your time and thoughts in my matters; I die," these were his very words, "if I do not somewhat towards your fortune: you shall not deny to accept a piece of land which I will bestow upon you." My answer, I remember, was, that, for my fortune, it was no great matter; but that his lordship's offer made me call to mind what was wont to be said, when I was in France, of the Duke of Guise, that he was the greatest usurer in France, because he had turned all his estate into obligations: meaning, that he had left himself nothing, but only had bound numbers of persons to him. "Now, my lord," said I, "I would not have you imitate his course, nor turn your estate thus by great gifts into obligations, for you will find many bad debtors." He bade me take no care for that, and pressed it: whereupon I said, "My lord, I see I must be your homager, and hold land of your gift; but do you know the manner of doing homage in law? Always it is with a saving of his faith to the king and his other lords; and, therefore, my lord," said I, "I can be no more yours than I was, and it must be with the ancient savings: and if I grow to be a rich man, you will give me leave to give it back again to some of your unrewarded followers."

But, to return: sure I am, though I can arrogate nothing to myself but that I was a faithful remembrancer to his lordship, that while I had most credit with him, his fortune went on best: and yet in two main points we always directly and contradictorily differed, which I will mention to your lordship, because it giveth light to all that followed. The one was, I ever set this down, that the only course to be held with the queen, was by obsequiousness and observance; and I remember I would usually engage confidently, that if he would take that course constantly, and

with choice of good particulars to express it, the queen would be brought in time to Ahasuerus's question, to ask, "What should be done to the man that the king would honour?" Meaning, that her goodness was without limit, where there was a true concurrence: which I knew, in her nature, to be true. My lord, on the other side, had a settled opinion, that the queen could be brought to nothing, but by a kind of necessity and authority; and, I well remember, when, by violent courses at any time, he had got his will, he would ask me, "Now, sir, whose principles be true?" And I would again say to him; "My lord, these courses be like to hot waters, they will help at a pang; but if you use them, you shall spoil the stomach, and you shall be fain still to make them stronger, and stronger, and yet in the end, they will lessen their operation;" with much other variety, wherewith I used to touch that string. Another point was, that I always vehemently dissuaded him from seeking greatness by a military dependence, or by a popular dependence, as that which would breed in the queen jealousy, in himself presumption, and, in the state, perturbation: and I did usually compare them to Icarus's two wings, which were joined on with wax, and would make him venture to soar too high, and then fail him at the height. And I would farther say unto him; "My lord, stand upon two feet, and fly not upon two wings: the two feet are the two kinds of justice, commutative, and distributive: use your greatness for advancing of merit and virtue, and relieving wrongs and burdens; you shall need no other art or finesse:" but he would tell me, that opinion came not from my mind, but from my robe. But it is very true, that I, that never meant to enthral myself to my Lord of Essex, nor any other man, more than stood with the public good, did, though I could little prevail, divert him by all means possible from courses of the wars and popularity: for I saw plainly, the queen must either live or die; if she lived, then the times would be as in the declination of an old prince; if she died, the times would be as in the beginning of a new; and that, if his lordship did rise too fast in these courses, the times might be dangerous for him, and he for them. Nay, I remember, I was thus plain with him upon his voyage to the islands, when I saw every spring put forth such actions of charge and provocation, that I said to him, "My lord, when I came first unto you, I took you for a physician that desired to cure the diseases of the state; but now I doubt you will be like those physicians which can be content to keep their patients low, because they would always be in request." Which plainness, he, nevertheless, took very well, as he had an excellent ear, and was "patientissimus veri," and assured me the case of the realm required it: and I think this speech of mi[illegible] and the like renewed afterwards, pricked him to write that apology, which is in many men's hands.

But this difference in two points so main and material, bred in process of time a discontinuance of privateness, as it is the manner of men seldom to communicate where they think their courses not approved, between his lordship and myself: so as I was not called nor advised with for some year and a half before his lordship's going into Ireland, as in former time; yet, nevertheless, touching his going into Ireland, it pleased him expressly, and in a set manner, to desire mine opinion and counsel. At which time I did not only dissuade, but protest against his going; telling him, with as much vehemency and asseveration as I could, that absence in that kind would exulcerate the queen's mind, whereby it would not be possible for him to carry himself so as to give her sufficient contentment; nor for her to carry herself so as to give him sufficient countenance: which would be ill for her, ill for him, and ill for the state. And, because I would omit no argument, I remember, I stood also upon the difficulty of the action; setting before him, out of histories, that the Irish was such an enemy as the ancient Gauls, or Britons, or Germans were; and that we saw how the Romans, who had such discipline to govern their soldiers, and such donatives to encourage them, and the whole world in a manner to levy them; yet when they came to deal with enemies, which placed their felicity only in liberty, and the sharpness of their sword, and had the natural elemental advantages of woods, and bogs, and hardness of bodies, they ever found they had their hands full of them; and therefore concluded, that going over with such expectation as he did, and through the churlishness of the enterprise, not like to answer it, would mightily diminish his reputation: and many other reasons I used, so as, I am sure, I never in any thing in my lifetime, dealt with him in like earnestness by speech, by writing, and by all the means I could devise For I did as plainly see his overthrow chained, as it were by destiny, to that journey, as it is possible for any man to ground a judgment upon future contingents. But, my lord, howsoever his ear was open, yet his heart and resolution was shut against that advice, whereby his ruin might have been prevented. After my lord's going, I saw then how true a prophet I was, in regard of the evident alteration which naturally succeeded in the queen's mind; and thereupon I was still in watch to find the best occasion, that, in the weakness of my power, I could either take or minister, to pull him out of the fire, if it had been possible: and not long after, methought I saw some overture thereof, which I apprehended readily; a particularity which I think to be known to very few, and the which I do the rather relate unto your lordship, because I hear it should be talked, that while my lord was in Ireland, I revealed

some matters against him, or I cannot tell what; which, if it were not a mere slander as the rest is, but had any, though never so little colour, was surely upon this occasion. The queen, one day at Nonesuch, a little, as I remember, before Cuffe's coming over, where I attended her, showed a passionate distaste of my lord's proceedings in Ireland, as if they were unfortunate, without judgment, contemptuous, and not without some private end of his own, and all that might be; and was pleased, as she spake of it to many, that she trusted least, so to fall into the like speech with me. Whereupon I, who was still awake, and true to my grounds, which I thought surest for my lord's good, said to this effect: "Madam, I know not the particulars of estate, and I know this, that princes' actions must have no abrupt periods or conclusions; but otherwise I would think, that if you had my Lord of Essex here with a white staff in his hand, as my Lord of Leicester had, and continued him still about you for society to yourself, and for an honour and ornament to your attendance and court, in the eyes of your people, and in the eyes of foreign ambassadors, then were he in his right element; for to discontent him as you do, and yet to put arms and power into his hands, may be a kind of temptation to make him prove cumbersome and unruly. And, therefore, if you would 'imponere bonam clausulam,' and send for him, and satisfy him with honour, here near you, if your affairs, which, as I have said, I am not acquainted with, will permit it, I think were the best way." Which course, your lordship knoweth, if it had been taken, then all had been well, and no contempt in my lord's coming over, nor continuance of these jealousies, which that employment of Ireland bred, and my lord here in his former greatness. Well, the next news that I heard was, that my lord was come over, and that he was committed to his chamber for leaving Ireland without the queen's license; this was at Nonesuch, where, as my duty was, I came to his lordship, and talked with him privately about a quarter of an hour, and he asked mine opinion of the course that was taken with him: I told him, "My lord, 'Nubecula est cito transibit;' it is but a mist. But shall I tell your lordship, it is as mists are: if it go upwards, it may perhaps cause a shower: if downwards, it will clear up. And, therefore, good my lord, carry it so, as you take away by all means all umbrages and distastes from the queen; and especially, if I were worthy to advise you, as I have been by yourself thought, and now your question imports the continuance of that opinion, observe three points: first, make not this cessation or peace, which is concluded with Tyrone, as a service wherein you glory, but as a shuffling up of a prosecution which was not very fortunate. Next, represent not to the queen any necessity of estate, whereby, as by a coercion or wrench, she should think herself enforced to send you back into Ireland, but leave it to her. Thirdly, seek access 'importune, opportune,' seriously, sportingly, every way." I remember my lord was willing to hear me, but spake very few words, and shaked his head sometimes, as if he thought I was in the wrong; but sure I am, he did just contrary in every one of these three points. After this, during the while since my lord was committed to my lord keeper's, I came divers times to the queen, as I had used to do, about causes of her revenue and law business, as is well known; by reason of which accesses, according to the ordinary charities of court, it was given out, that I was one of them that incensed the queen against my Lord of Essex. These speeches I cannot tell, nor I will not think, that they grew any way from her majesty's own speeches, whose memory I will ever honour; if they did, she is with God, and "Miserum est ab illis lædi, de quibus non possis queri." But I must give this testimony to my Lord Cecil, that one time, in his house at the Savoy, he dealt with me directly, and said to me, "Cousin, I hear it, but I believe it not, that you should do some ill office to my Lord of Essex; for my part, I am merely passive, and not active, in this action; and I follow the queen, and that heavily, and I lead her not; my Lord of Essex is one that, in nature, I could consent with, as well as with any one living; the queen indeed, is my sovereign, and I am her creature, I may not lose her, and the same course I would wish you to take." Whereupon I satisfied him how far I was from any such mind. And, as sometimes it cometh to pass, that men's inclinations are opened more in a toy, than in a serious matter: a little before that time, being about the middle of Michaelmas term, her majesty had a purpose to dine at my lodge at Twicknam Park, at which time I had, though I profess not to be a poet, prepared a sonnet, directly tending and alluding to draw on her majesty's reconcilement to my lord; which, I remember, also I showed to a great person, and one of my lord's nearest friends, who commended it. This, though it be, as I said, but a toy, yet it showed plainly in what spirit I proceeded; and that I was ready not only to do my lord good offices, but to publish and declare myself for him: and never was I so ambitious of any thing in my lifetime, as I was, to have carried some token or favour from her majesty to my lord; using all the art I had, both to procure her majesty to send, and myself to be the messenger. For, as to the former, I feared not to allege to her, that this proceeding toward my lord, was a thing towards the people, very unplausible; and, therefore, wished her majesty, however she did, yet to discharge herself of it, and lay it upon others; and, therefore, that she should intermix her proceeding with some immediate graces from herself, that

the world might take knowledge of her princely nature and goodness, lest it should alienate the hearts of her people from her: which I did stand upon; knowing well, that if she once relented to send or visit, those demonstrations would prove matter of substance for my lord's good. And to draw that employment upon myself, I advised her majesty, that whensoever God should move her to turn the light of her favours towards my lord, to make signification to him thereof; that her majesty, if she did it not in person, would, at the least, use some such mean as might not entitle themselves to any part of the thanks, as persons that were thought mighty with her to work her, or to bring her about; but to use some such as could not be thought but a mere conduit of her own goodness. But I could never prevail with her, though I am persuaded she saw plainly whereat I levelled; and she plainly had me in jealousy, that I was not hers entirely, but still had inward and deep respects towards my lord, more than stood at that time with her will and pleasure. About the same time, I remember an answer of mine in a matter which had some affinity with my lord's cause, which, though it grew from me, went after about in others' names. For her majesty being mightily incensed with that book which was dedicated to my Lord of Essex, being a story of the first year of King Henry IV., thinking it a seditious prelude to put into the people's head boldness and faction, said, She had an opinion that there was treason in it, and asked me if I could not find any places in it that might be drawn within case of treason: whereto I answered; For treason, surely, I found none: but for felony, very many. And when her majesty hastily asked me, Wherein? I told her, the author had committed very apparent theft; for he had taken most of the sentences of Cornelius Tacitus, and translated them into English, and put them into his text. And another time, when the queen would not be persuaded that it was his writing whose name was to it, but that it had some more mischievous author; and said, with great indignation, That she would have him racked to produce his author: I replied; "Nay, madam, he is a doctor; never rack his person, but rack his style; let him have pen, ink, and paper, and help of books, and be enjoined to continue the story where it breaketh off, and I will undertake, by collating the styles, to judge whether he were the author or no." But for the main matter, sure I am, when the queen at any time asked mine opinion of my lord's case, I ever in one tenour said unto her; That they were faults which the law might term contempts; because they were the transgression of her particular directions and instructions: but, then, what defence might be made of them, in regard of the great interest the person had in her majesty's favour; in regard of the greatness of his place, and the ampleness of his commission; in regard of the nature of the business, being action of war, which, in common cases, cannot be tied to strictness of instructions; in regard of the distance of the place, having also a sea between, that his demands, and her commands, must be subject to wind and weather; in regard of a council of state in Ireland, which he had at his back to avow his actions upon; and, lastly, in regard of a good intention, that he would allege for himself; which, I told her, in some religions was held to be a sufficient dispensation for God's commandments, much more for princes': in all these regards, I besought her majesty to be advised again and again, how she brought the cause into any public question. Nay, I went farther; for I told her, my lord was an eloquent and well-spoken man; and, besides his eloquence of nature or art, he had an eloquence of accident which passed them both, which was the pity and benevolence of his hearers; and, therefore, that when he should come to his answer for himself, I doubted his words would have so unequal a passage above theirs that should charge him, as would not be for her majesty's honour; and therefore wished the conclusion might be, that they might wrap it up privately between themselves; and that she would restore my lord to his former attendance, with some addition of honour to take away discontent. But this I will never deny; that I did show no approbation generally of his being sent back again into Ireland, both because it would have carried a repugnancy with my former discourse, and because I was in mine own heart fully persuaded that it was not good, either for the queen, or for the state, or for himself: and yet I did not dissuade it, neither, but left it ever as "locus lubricus." For this particularity I do well remember, that after your lordship was named for the place in Ireland, and not long before your going, it pleased her majesty at Whitehall to speak to me of that nomination: at which time I said to her; "Surely, madam, if you mean not to employ my Lord of Essex thither again, your majesty cannot make a better choice;" and was going on to show some reason, and her majesty interrupted me with great passion: "Essex!" said she; "whensoever I send Essex back again into Ireland, I will marry you: claim it of me." Whereunto I said; "Well, madam, I will release that contract, if his going be for the good of your state." Immediately after, the queen had thought of a course, which was also executed, to have somewhat published in the Star Chamber, for the satisfaction of the world, touching my Lord of Essex his restraint, and my lord not to be called to it; but occasion to be taken by reason of some libels then dispersed: which, when her majesty propounded unto me, I was utterly against it; and told her plainly, That the people would say, that my lord

was wounded upon his back, and that Justice had her balance taken from her, which ever consisted of an accusation and defence; with many other quick and significant terms to that purpose: insomuch, that, I remember, I said, that my lord, "in foro famæ," was too hard for her: and, therefore, wished her, as I had done before, to wrap it up privately. And certainly I offended her at that time, which was rare with me; for I call to mind, that both the Christmas, Lent, and Easter term following, though I came divers times to her upon law business, yet, methought her face and manner was not so clear and open to me, as it was at the first. And she did directly charge me, that I was absent that day at the Star Chamber, which was very true; but I alleged some indisposition of body to excuse it: and during all the time aforesaid, there was "altum silentium" from her to me, touching my Lord of Essex's causes.

But towards the end of Easter term her majesty brake with me, and told me, That she had found my words true; for that the proceedings in the Star Chamber had done no good, but rather kindled factious bruits, as she termed them, than quenched them; and, therefore, that she was determined now, for the satisfaction of the world, to proceed against my lord in the Star Chamber by an information "ore tenus," and to have my lord brought to his answer: howbeit, she said, she would assure me, that whatsoever she did should be towards my lord "ad castigationem, et non ad destructionem;" as indeed she had often repeated the same phrase before: whereunto I said, to the end utterly to divert her, "Madam, if you will have me speak to you in this argument, I must speak to you as Friar Bacon's head spake, that said first, 'Time is,' and then 'Time was;' and 'Time will never be:' for certainly, said I, it is now far too late, the matter is cold, and hath taken too much wind." Whereat she seemed again offended, and rose from me; and that resolution for a while continued: and, after, in the beginning of midsummer term, I attending her, and finding her settled in that resolution, which I heard of also otherwise, she falling upon the like speech; it is true that, seeing no other remedy, I said to her slightly, "Why, madam, if you will needs have a proceeding, you were best have it in some such sort as Ovid spake of his mistress; 'est aliquid luce patente minus;' to make a council-table matter of it, and there an end:" which speech again she seemed to take in ill part; but, yet, I think it did good at that time, and helped to divert that course of proceeding by information in the Star Chamber. Nevertheless, afterwards it pleased her to make a more solemn matter of the proceeding; and some few days after, an order was given that the matter should be heard at York House, before an assembly of counsellors, peers, and judges, and some audience of men of quality to be admitted: and then did some principal counsellors send for us of the learned counsel, and notify her majesty's pleasure unto us; save that it was said to me openly by one of them, that her majesty was not yet resolved whether she would have me forborne in the business or no. And hereupon might arise that other sinister and untrue speech, that, I hear, is raised of me, how I was a suitor to be used against my Lord of Essex at that time: for it is very true, that I, that knew well what had passed between the queen and me, and what occasion I had given her, both of distaste and distrust, in crossing her disposition, by standing steadfastly for my Lord of Essex, and suspecting it also to be a stratagem arising from some particular emulation, I writ to her two or three words of compliment, signifying to her majesty, "That, if she would be pleased to spare me in my Lord of Essex's cause, out of the consideration she took of my obligation towards him, I should reckon it for one of her greatest favours: but otherwise desiring her majesty to think that I knew the degrees of duties; and, that no particular obligation whatsoever to any subject, could supplant, or weaken that entireness of duty, that I did owe and bear to her and her service." And this was the goodly suit I made, being a respect no man that had his wits could have omitted: but, nevertheless, I had a farther reach in it; for, I judged that day's work would be a full period of any bitterness, or harshness between the queen and my lord: and, therefore, if I declared myself fully according to her mind at that time, which could not do my lord any manner of prejudice, I should keep my credit with her ever after, whereby to do my lord service. Hereupon the next news that I heard, was, that we were all sent for again; and, that her majesty's pleasure was, we all should have parts in the business; and the lords falling into distribution of our parts, it was allotted to me, that I should set forth some undutiful carriage of my lord, in giving occasion and countenance to a seditious pamphlet, as it was termed, which was dedicated unto him, which was the book before-mentioned of King Henry IV. Whereupon I replied to that allotment, and said to their lordships, That it was an old matter, and had no manner of coherence with the rest of the charge, being matters of Ireland: and, therefore, that I having been wronged by bruits before, this would expose me to them more; and it would be said I gave in evidence mine own tales. It was answered again with good show, That because it was considered how I stood tied to my Lord of Essex, therefore, that part was thought fittest for me, which did him least hurt; for that, whereas all the rest was matter of charge and accusation, this only was but matter of caveat and admonition. Wherewith, though I was in mine own mind little satisfied, because I knew well a

man were better to be charged with some faults, than admonished of some others: yet, the conclusion binding upon the queen's pleasure directly, "volens nolens," I could not avoid that part that was laid upon me: which part, if in the delivery I did handle not tenderly, though no man before me did in so clear terms free from my lord from all disloyalty, as I did, that, your lordship knoweth, must be ascribed to the superior duty I did owe to the queen's fame and honour in a public proceeding, and partly to the intention I had to uphold myself in credit and strength with the queen, the better to be able to do my lord good offices afterwards: for, as soon as this day was past, I lost no time; but, the very next day following, as I remember, I attended her majesty, fully resolved to try and put in ure my utmost endeavour, so far as in my weakness could give furtherance, to bring my lord again speedily into court and favour; and knowing, as I supposed at least, how the queen was to be used, I thought that to make her conceive that the matter went well then, was the way to make her leave off there: and I remember well, I said to her, "You have now, madam, obtained victory over two things, which the greatest princes in the world cannot at their wills subdue; the one is, over fame; the other is, over a great mind: for, surely, the world is now, I hope, reasonably well satisfied; and for my lord, he did show that humiliation towards your majesty, as I am persuaded he was never in his lifetime more fit for your majesty's favour than he is now: therefore, if your majesty will not mar it by lingering, but give over at the best, and now you have made so good a full point, receive him again with tenderness, I shall then think, that all that is past is for the best." Whereat, I remember, she took exceeding great contentment, and did often iterate and put me in mind, that she had ever said, That her proceedings should be "ad reparationem," and not "ad ruinam;" as who saith, that now was the time I should well perceive, that that saying of hers should prove true. And, further, she willed me to set down in writing all that passed that day. I obeyed her commandment, and within some few days after brought her again the narration, which I did read unto her in two several afternoons: and when I came to that part that set forth my lord's own answer, which was my principal care, I do well bear in mind, that she was extraordinarily moved with it, in kindness and relenting towards my lord; and told me afterwards, speaking how well I had expressed my lord's part, That she perceived old love would not easily be forgotten: whereunto I answered suddenly, that I hoped she meant that by herself. But in conclusion I did advise her, That now she had taken a representation of the matter to herself, that she would let it go no farther: "For, madam," said I, "the fire blazeth well already, what should you tumble it? And, besides, it may please you to keep a convenience with yourself in this case; for, since your express direction was, there should be no register nor clerk to take this sentence, nor no record or memorial made up of the proceeding, why should you now do that popularly, which you would not admit to be done judicially?" Whereupon she did agree that that writing should be suppressed; and I think there were not five persons that ever saw it. But from this time forth, during the whole latter end of that summer, while the court was at Nonesuch and Oatlands, I made it my task and scope to take and give occasions for my lord's redintegration in his fortunes: which my intention, I did also signify to my lord as soon as ever he was at his liberty; whereby I might, without peril of the queen's indignation, write to him: and having received from his lordship a courteous and loving acceptation of my good will and endeavours, I did apply it in all my accesses to the queen, which were very many at that time; and purposely sought and wrought upon other variable pretences, but only and chiefly for that purpose. And, on the other side, I did not forbear to give my lord from time to time faithful advertisement what I found, and what I wished. And I drew for him, by his appointment, some letters to her majesty; which though I knew well his lordship's gift and style was far better than mine own, yet, because he required it, alleging, that by his long restraint he was grown almost a stranger to the queen's present conceits, I was ready to perform it: and, sure I am, that for the space of six weeks or two months, it prospered so well, as I expected continually his restoring to his attendance. And I was never better welcome to the queen, nor more made of, than when I spake fullest and boldest for him: in which kind the particulars were exceeding many; whereof, for an example, I will remember to your lordship one or two. As, at one time, I call to mind, her majesty was speaking of a fellow that undertook to cure, or, at least, to ease my brother of his gout, and asked me how it went forward: and I told her majesty, That at the first he received good by it; but after, in the course of his cure, he found himself at a stay, or rather worse: the queen said again, "I will tell you, Bacon, the error of it: the manner of these physicians, and especially these empirics, is to continue one kind of medicine; which at the first is proper, being to draw out the ill humour; but, after, they have not the discretion to change the medicine, but apply still drawing medicines, when they should rather intend to cure and corroborate the part." "Good Lord! madam," said I, "how wisely and aptly can you speak and discern of physic ministered to the body, and consider not that there is the like occasion of physic ministered to the mind: as now in the case of my Lord of Essex, your princely word

ever was, that you intended ever to reform his mind, and not ruin his fortune: I know well you cannot but think that you have drawn the humour sufficiently; and, therefore, it were more than time, and it were but for doubt of mortifying or exulcerating, that you did apply and minister strength and comfort unto him: for these same gradations of yours are fitter to corrupt, than correct any mind of greatness." And another time I remember she told me for news, That my lord had written unto her some very dutiful letters, and that she had been moved by them; and when she took it to be the abundance of his heart, she found it to be but a preparative to a suit for the renewing of his farm of sweet wines. Whereunto I replied, "O madam, how doth your majesty construe these things, as if these two could not stand well together, which, indeed, nature hath planted in all creatures! For there are but two sympathies, the one towards perfection, the other towards preservation; that to perfection, as the iron tendeth to the loadstone; that to preservation, as the vine will creep towards a stake or prop that stands by it; not for any love to the stake, but to uphold itself. And, therefore, madam, you must distinguish: my lord's desire to do you service is, as to his perfection, that which he thinks himself to be born for; whereas his desire to obtain this thing of you, is but for a sustentation."

And, not to trouble your lordship with many other particulars, like unto these, it was at the selfsame time that I did draw, with my lord's privity, and by his appointment, two letters, the one written as from my brother, the other as an answer returned from my lord, both to be by me in secret manner showed to the queen, which it pleased my lord very strangely to mention at the bar; the scope of which were but to represent and picture forth unto her majesty my lord's mind to be such, as I knew her majesty would fainest have had it: which letters whosoever shall see, for they cannot now be retracted or altered, being by reason of my brother's or his lordship's servants' delivery long since come into divers hands, let him judge, especially if he knew the queen, and do remember those times, whether they were not the labours of one that sought to bring the queen about for my Lord of Essex his good. The truth is, that the issue of all his dealing grew to this, that the queen, by some slackness of my lord's, as I imagine, liked him worse and worse, and grew more incensed towards him. Then she remembering belike the continual, and incessant, and confident speeches and courses that I had held on my lord's side, became utterly alienated from me, and for the space of, at least, three months, which was between Michaelmas and New-year's-tide following, would not so much as look on me, but turned away from me with express and purpose-like discountenance wheresoever she saw me; and at such time as I desired to speak with her about law-business, ever sent me forth very slight refusals, insomuch as it is most true, that immediately after New-year's-tide I desired to speak with her, and being admitted to her, I dealt with her plainly; and said, "Madam, I see you withdraw your favour from me, and now I have lost many friends for your sake, I shall lose you too: you have put me like one of those that the Frenchmen call "enfans perdus," that serve on foot before horsemen; so have you put me into matters of envy without place, or without strength; and I know at chess a pawn before the king is ever much played upon; a great many love me not, because they think I have been against my Lord of Essex; and you love me not, because you know I have been for him; yet will I never repent me, that I have dealt in simplicity of heart towards you both, without respect of cautions to myself; and, therefore, 'vivus videnque pereo;' if I do break my neck, I shall do it in a manner as Mr. Dorrington did it, which walked on the battlements of the church many days, and took a view and survey where he should fall. And, so, madam, said I, I am not so simple but that I take a prospect of mine overthrow; only I thought I would tell you so much, that you may know that it was faith, and not folly that brought me into it, and so I will pray for you." Upon which speeches of mine, uttered with some passion, it is true her majesty was exceedingly moved; and accumulated a number of kind and gracious words upon me, and willed me to rest upon this, "Gratia mea sufficit," and a number of other sensible and tender words and demonstrations, such as more could not be; but as touching my Lord of Essex, "ne verbum quidem." Whereupon I departed, resting then determined to meddle no more in the matter; as that that I saw would overthrow me, and not be able to do him any good. And thus I made mine own peace with mine own confidence* at that time; and this was the last time I saw her majesty before the eighth of February, which was the day of my Lord of Essex his misfortune; after which time, for that I performed at the bar in my public service, your lordship knoweth, by the rules of duty, that I was to do it honestly, and without prevarication; but for my putting myself into it, I protest before God, I never moved either the queen, or any person living, concerning my being used in the service, either of evidence or examination; but it was merely laid upon me with the rest of my fellows. And for the time which passed, I mean between the arraignment and my lord's suffering, I well remember, I was but once with the queen, at what time, though I durst not deal directly for my lord as things then stood,

* Query *conscience*, but note that in the first edition it is confidence.

yet generally I did both commend her majesty's mercy, terming it to her as an excellent balm that did continually distil from her sovereign hands, and made an excellent odour in the senses of her people; and not only so, but I took hardiness to extenuate, not the fact, for that I durst not, but the danger, telling her, that if some base or cruel-minded persons had entered into such an action, it might have caused much blood and combustion: but it appeared well, they were such as knew not how to play the malefactors; and some other words which I now omit. And as for the rest of the carriage of myself in that service, I have many honourable witnesses that can tell, that the next day after my lord's arraignment, by my diligence and information, touching the quality and nature of the offenders, six of nine were stayed, which otherwise had been attainted, I bringing their lordships' letter for their stay, after the jury was sworn to pass upon them; so near it went: and how careful I was, and made it my part, that whosoever was in trouble about that matter, as soon as ever his case was sufficiently known and defined of, might not continue in restraint, but be set at liberty; and many other parts, which, I am well assured of, stood with the duty of an honest man. But, indeed, I will not deny for the case of Sir Thomas Smith of London, the queen demanding my opinion of it: I told her, I thought it was as hard as any of the rest. But what was the reason? Because, at that time, I had seen only his accusation, and had never been present at any examination of his; and the matter so standing, I had been very untrue to my service, if I had not delivered that opinion. But, afterwards, upon a re-examination of some that charged him, who weakened their own testimony, and especially hearing himself "viva voce," I went instantly to the queen, out of the soundness of my conscience, not regarding what opinion I had formerly delivered, and told her majesty, I was satisfied, and resolved in my conscience, that for the reputation of the action, the plot was to countenance the action farther by him in respect of his place, than they had indeed any interest or intelligence with him. It is very true also, about that time, her majesty taking a liking of my pen, upon that which I formerly had done concerning the proceeding at York House, and likewise upon some other declarations, which in former times by her appointment I put in writing, commanded me to pen that book, which was published for the better satisfaction of the world; which I did, but so, as never secretary had more particular and express directions and instructions in every point, how to guide my hand in it; and not only so, but after that I had made a first draught thereof, and propounded it to certain principal counsellors by her majesty's appointment, it was perused, weighed, censured, altered, and made almost a new writing, according to their lordships' better consideration; wherein their lordships and myself both were as religious and curious of truth, as desirous of satisfaction: and myself indeed gave only words and form of style, in pursuing their direction. And after it had passed their allowance, it was again exactly perused by the queen herself, and some alterations made again by her appointment: nay, and after it was set to print, the queen, who, as your lordship knoweth, as she was excellent in great matters, so she was exquisite in small, and noted that I could not forget my ancient respect to my Lord of Essex, in terming him ever my Lord of Essex, my Lord of Essex, almost in every page of the book, which she thought not fit, but would have it made Essex, or the late Earl of Essex: whereupon of force it was printed "de novo," and the first copies suppressed by her peremptory commandment.

And this, my good lord, to my farthest remembrance, is all that passed wherein I had part; which I have set down as near as I could in the very words and speeches that were used, not because they are worthy the repetition, I mean those of mine own; but to the end your lordship may lively and plainly discern between the face of truth, and a smooth tale: and the rather, also, because, in things that passed a good while since, the very words and phrases did sometimes bring to my remembrance the matters: wherein I report me to your honourable judgment, whether you do not see the traces of an honest man: and had I been as well believed either by the queen or by my lord, as I was well heard by them both, both my lord had been fortunate, and so had myself in his fortune.

To conclude, therefore, I humbly pray your lordship to pardon me for troubling you with this long narration; and that you will vouchsafe to hold me in your good opinion, till you know I have deserved, or find that I shall deserve the contrary; and so ever I continue

At your lordship's honourable commandments, very humbly,

F. B.

THE PROCEEDINGS*

OF

THE EARL OF ESSEX.

The Points of Form worthy to be observed.

The fifth of June in Trinity term, upon Thursday, being no Star Chamber day, at the ordinary hour when the courts sit at Westminster, were assembled together at the lord keeper's house in the great chamber, her majesty's privy-council, enlarged and assisted for that time and cause by the special call and associating of certain selected persons, viz. four earls, two barons, and four judges of the law, making in the whole a council or court of eighteen persons, who were attended by four of her majesty's learned counsel for charging the earl; and two clerks of the council, the one to read, the other as a register; and an auditory of persons, to the number, as I could guess, of two hundred, almost all men of quality, but of every kind or profession; nobility, court, law, country, city. The upper end of the table left void for the earl's appearance, who, after the commissioners had sat a while, and the auditory was quiet from the first throng to get in, and the doors shut, presented himself and kneeled down at the board's end, and so continued till he was licensed to stand up.

The Names of the Commissioners.

Lord Archbishop,
Lord Keeper, &c.

It was opened, that her majesty being imperial, and immediate under God, was not holden to render account of her actions to any; howbeit, because she had chosen ever to govern, as well with satisfaction as with sovereignty, and the rather, to command down the winds of malicious and seditious rumours, wherewith men's conceits may have been tossed to and fro, she was pleased to call the world to an understanding of her princely course held towards the Earl of Essex, as well in here-before protracting as in now proceeding.

The earl repairing from his government into this realm in August last, contrary to her majesty's express and most judicial commandment, though the contempt were in that point visible, and her majesty's mind prepared to a just and high displeasure, in regard of that realm of Ireland set at hazard by his former disobedience to her royal directions, yet kept that stay, as she commanded my lord only to his chamber in court, until his allegations might by her privy-council be questioned and heard; which account taken, and my lord's answers appearing to be of no defence, that shadow of defence which was offered consisted of two parts: the one his own conceit of some likelihood of good effects to ensue of the course held, the other a vehement and overruling persuasion of the council there, though he were indeed as absolutely freed from opinion of the council of Ireland, as he was absolutely tied to her majesty's trust and instructions. Nevertheless, her majesty, not unwilling to admit any extenuation of his offence; and considering the one point required advertisement out of Ireland, and the other further expectation of the event and sequel of the affairs there, and so both points asked time and protraction; her majesty proceeded still with reservation, not to any restraint of my lord according to the nature and degree of his offence, but to a commitment of him, "sub libera custodia," in the lord keeper's house.

After, when both parts of this defence plainly failed my lord, yea, and proved utterly adverse to him, for the council of Ireland in plain terms disavowed all those his proceedings, and the event made a miserable interpretation of them, then her majesty began to behold the offence in nature and likeness, as it was divested from any palliation or cover, and in the true proportion and magnitude thereof, importing the peril of a kingdom: which consideration wrought in her majesty a strange effect, if any thing which is heroical in virtue can be strange in her nature; for when offence was grown unmeasurably offensive, then did grace superabound; and in the heat of all the ill news out of Ireland, and other advertisements thence to my lord's disadvantage, her majesty entered into a resolution, out of herself and her inscrutable goodness, not to overthrow my lord's fortune irreparably, by public and proportionable justice: notwithstanding, inasmuch as about that time there did fly about in London streets and theatres

* At York House, in June, 1600, prepared for Queen Elizabeth by her command, and read to her by Mr. Bacon, but never published.

divers seditious libels; and Paul's and ordinaries were full of bold and factious discourses, whereby not only many of her majesty's faithful and zealous counsellors and servants were taxed, but withal the hard estate of Ireland was imputed to any thing rather than unto the true cause, the earl's defaults, though this might have made any prince on earth to lay aside straightways the former resolution taken, yet her majesty in her moderation persisted in her course of clemency, and bethought herself of a mean to right her own honour, and yet spare the earl's ruin; and therefore taking a just and most necessary occasion upon these libels, of an admonition to be given seasonably, and as is oft accustomed; the last Star Chamber day of Michaelmas term, was pleased, that declaration should be made, by way of testimony, of all her honourable privy council, of her majesty's infinite care, royal provisions, and prudent directions for the prosecutions in Ireland, wherein the earl's errors, by which means so great care and charge was frustrated, were incidently touched.

But as in bodies very corrupt, the medicine rather stirreth and exasperateth the humour than purgeth it, so some turbulent spirits laid hold of this proceeding in so singular partiality towards my lord, as if it had been to his disadvantage, and gave out that this was to condemn a man unheard, and to wound him on his back, and to leave Justice her sword and take away her balance, which consisted of an accusation and a defence; and such other seditious phrases: whereupon her majesty seeing herself interested in honour, which she hath ever sought to preserve as her eye, clear and without mote, was enforced to resolve of a judicial hearing of the cause, which was accordingly appointed in the end of Hilary term. At the which time warning being given to my lord to prepare himself, he falling, as it seemed, in a deep consideration of his estate, made unto her majesty by letter an humble and effectual submission, beseeching her that that bitter cup of justice might pass from him, for those were his words; which wrought such an impression in her majesty's mind, that it not only revived in her her former resolution to forbear any public hearing, but it fetched this virtue out of mercy by the only touch, as few days after my lord was removed to further liberty in his own house, her majesty hoping that these bruits and malicious imputations would of themselves wax old and vanish: but finding it otherwise in proof, upon taste taken by some intermission of time, and especially beholding the humour of the time in a letter presumed to be written to her majesty herself by a lady, to whom, though nearest in blood to my lord, it appertained little to intermeddle in matters of this nature, otherwise than in course of humility to have solicited her grace and mercy; in which letter, in a certain violent and mineral spirit of bitterness, remonstrance, and representation is made to her majesty, as if my lord suffered under passion and faction, and not under justice mixed with mercy; which letter, though written to her sacred majesty, and therefore unfit to pass in vulgar hands, yet was first divulged by copies everywhere, that being, as it seemeth, the newest and finest form of libelling, and since committed to the press: her majesty in her wisdom seeing manifestly these rumours thus nourished had got too great a head to be repressed without some hearing of the cause, and calling my lord to answer; and yet, on the other side, being still informed touching my lord himself of his continuance of penitence and submission, did in conclusion resolve to use justice, but with the edge and point taken off and rebated; for whereas nothing leaveth that taint upon honour, which in a person of my lord's condition is hardliest repaired, in question of justice, as to be called to the ordinary and open place of offenders and criminals, her majesty had ordered that the hearing should be "intra domesticos parietes," and not "luce forensi." And whereas again in the Star Chamber there be certain formalities not fit in regard of example to be dispensed with, which would strike deeper both into my lord's fortune and reputation; as the fine which is incident to a sentence there given, and the imprisonment of the Tower, which in case of contempts that touch the point of estate doth likewise follow; her majesty turning this course, had directed that the matters should receive, before a great, honourable, and selected council, a full and deliberate, and yet, in respect, a private, mild, and gracious hearing.

All this was not spoken in one undivided speech, but partly by the first that spake of the learned counsel, and partly by some of the commissioners; for in this and the rest I keep order of matter, and not of circumstance.

The Matters laid to my Lord's Charge.

The matters wherewith my lord was charged were of two several natures; of a higher, and of an inferior degree of offence.

The former kind purported great and high contempts and points of misgovernance in his office of her majesty's lieutenant and governor of her realm of Ireland; and in the trust and authority thereby to him committed.

The latter contained divers notorious errors and neglects of duty, as well in his government as otherwise.

The great contempts and points of misgovernment and malversation in his office, were articulate into three heads.

I. The first was the journey into Munster, whereby the prosecution in due time upon Tyrone in Ulster was overthrown: wherein he proceeded contrary to his directions, and the whole design of his employment: whereof

ensued the consumption of her majesty's army, treasure, and provisions, and the evident peril of that kingdom.

II. The second was the dishonourable and dangerous treaty held, and cessation concluded with the same arch-rebel, Tyrone.

III. The third was his contemptuous leaving his government, contrary to her majesty's absolute mandate under her hand and signet, and in a time of so imminent and instant danger.

For the first, it had two parts; that her majesty's resolution and direction was precise and absolute for the northern prosecution, and that the same direction was by my lord, in regard of the journey to Munster, wilfully and contemptuously broken.

It was therefore delivered, that her majesty, touched with a true and princely sense of the torn and broken estate of that kingdom of Ireland, entered into a most Christian and magnanimous resolution to leave no faculty of her regal power or policy unemployed for the reduction of that people, and for the suppressing and utter quenching of that flame of rebellion, wherewith that country was and is wasted: whereupon her majesty was pleased to take knowledge of the general conceit, how the former making and managing of the actions there had been taxed, upon two exceptions; the one, that the proportions of forces which had been there maintained and continued by supplies, were not sufficient to bring the prosecutions to a period: the other, that the prosecutions had been also intermixed and interrupted with too many temporizing treaties, whereby the rebel did not only gather strength, but also find his strength more and more, so as ever such smothers broke forth again into greater flames. Which kind of discourses and objections, as they were entertained in a popular kind of observation, so were they ever chiefly patronised and apprehended by the earl, both upon former times and occasions, and now last when this matter was in deliberation. So as her majesty, to acquit her honour and regal function, and to give this satisfaction to herself and others, that she had left no way untried, resolved to undertake the action with a royal army and puissant forces, under the leading of some principal nobleman; in such sort, that, as far as human discourse might discern, it might be hoped, that by the expedition of a summer, things might be brought to that state, as both realms may feel some ease and respiration; this from charge and levies, and that from troubles and perils. Upon this ground her majesty made choice of my Lord of Essex for that service, a principal peer and officer of her realm, a person honoured with the trust of a privy counsellor, graced with the note of her majesty's special favour, infallibly betokening and redoubling his worth and value, enabled with the experience and reputation of former services, and honourable charges in the wars; a man every way eminent, select, and qualified for a general of a great enterprise, intended for the recovery and reduction of that kingdom, and not only or merely as a lieutenant or governor of Ireland.

My lord, after that he had taken the charge upon him, fell straightways to make propositions answerable to her majesty's ends, and answerable to his own former discourses and opinions; and chiefly did set down one full and distinct resolution, that the design and action, which of all others was most final and summary towards an end of those troubles, and which was worthy her majesty's enterprise with great and puissant forces, was a prosecution to be made upon the arch-traitor Tyrone in his own strengths within the province of Ulster, whereby both the inferior rebels which rely upon him, and the foreigner upon whom he relieth, might be discouraged, and so to cut asunder both dependences: and for the proceeding with greater strength and policy in that action, that the main invasion and impression of her majesty's army should be accompanied and corresponded unto by the plantation of strong garrisons in the north, as well upon the river of Loghfoile as a postern of that province, as upon the hither frontiers, both for the distracting and bridling of the rebels' forces during the action, and again, for the keeping possession of the victory, if God should send it.

This proposition and project moving from my lord, was debated in many consultations. The principal men of judgment and service in the wars, as a council of war to assist a council of state, were called at times unto it; and this opinion of my lord was by himself fortified and maintained against all contradiction and opposite argument; and in the end, "ex unanimi consensu," it was concluded and resolved that the axe should be put to the root of the tree: which resolution was ratified and confirmed by the binding and royal judgment of her sacred majesty, who vouchsafed her kingly presence at most of those consultations.

According to a proposition and enterprise of this nature, were the proportions of forces and provisions thereunto allotted. The first proportion set down by my lord was the number of 12,000 foot and 1,200 horse; which being agreed unto, upon some other accident out of Ireland, the earl propounded to have it made 14,000 foot, and 1,300 horse, which was likewise accorded; within a little while after the earl did newly insist to have an augmentation of 2,000 more, using great persuasions and confident significations of good effect, if those numbers might be yielded to him, as which he also obtained before his departure; and besides the supplies of 2,000 arriving in July, he had authority to raise 2,000 Irish more, which he procured by his letters out of Ireland, with pretence to further the northern service: so as the army was raised in the conclusion and list to 16,000 foot, and 1,300 horse, supplied with 2,000 more at three months' end, and increased with 2,000 Irish upon this new demand; whereby her

majesty at that time paid 18,000 foot and 1,300 horse in the realm of Ireland. Of these forces, divers companies drawn out of the experienced bands of the Low Countries; special care taken that the new levies in the country should be of the ablest, and most disposed bodies; the army also animated and encouraged with the service of divers brave and valiant noblemen and gentlemen voluntaries; in sum, the most flourishing and complete troops that have been known to have been sent out of our nation in any late memory. A great mass of treasure provided and issued, amounting to such a total, as the charge of that army, all manner of ways, from the time of the first provisions and setting forth, to the time of my lord's returning into England, was verified to have drawn out of the coffers, besides the charge of the country, the quantity of 300,000*l.*, and so ordered as he carried with him three months' pay beforehand, and likewise victual, munition, and all habiliments of war whatsoever, with attendance of shipping allowed and furnished in a sortable proportion, and to the full of all my lord's own demands. For my lord being himself a principal counsellor for the preparations, as he was to be an absolute commander in the execution, his spirit was in every conference and conclusion in such sort, as when there happened any points of difference upon demands, my lord using the forcible advantages of the toleration and liberty which her majesty's special favour did give unto him, and the great devotion and forwardness of his fellow-counsellors to the general cause, and the necessity of his then present service, he did ever prevail and carry it; insomuch as it was objected and laid to my lord's charge as one of his errors and presumptions, that he did oftentimes, upon their propositions and demands, enter into contestations with her majesty, more a great deal than was fit. All which propositions before mentioned being to the utmost of my lord's own askings, and of that height and greatness, might really and demonstratively express and intimate unto him, besides his particular knowledge which he had, as a counsellor of estate, of the means both of her majesty and this kingdom, that he was not to expect to have the commandment of 16,000 foot and 1,300 horse, as an appurtenance to his lieutenancy of Ireland, which was impossible to be maintained; but, contrariwise, that in truth of intention he was designed as general for one great action and expedition, unto which the rest of his authority was but accessary and accommodate.

It was delivered further, that in the authority of his commission, which was more ample in many points than any former lieutenant had been vested with, there were many direct and evident marks of his designation to the northern action, as principally a clause whereby "merum arbitrium belli et pacis" was reposed in his sole trust and discretion, whereas all the lieutenants were ever tied unto the peremptory assistance and admonition of a certain number of voices of the council of Ireland. The occasion of which clause so passed to my lord, doth notably disclose and point unto the precise trust committed to my lord for the northern journey; for when his commission was drawn at first according to former precedents, and on the other side my lord insisted strongly to have this new and "prima facie" vast and exorbitant authority, he used this argument; that the council of Ireland had many of them livings and possessions in or near the province of Lemster and Munster; but that Ulster was abandoned from any such particular respects, whereby it was like, the council there would be glad to use her majesty's forces for the clearing and assuring of those territories and countries where their fortunes and estates were planted: so as, if he should be tied to their voices, he were like to be diverted from the main service intended: upon which reason that clause was yielded unto.

So as it was then concluded, that all circumstances tended to one point, that there was a full and precise intention and direction for Ulster, and that my lord could not descend into the consideration of his own quality and value; he could not muster his fair army; he could not account with the treasurer, and take consideration of the great mass of treasure issued; he could not look into the ample and new clause of his letters patent; he could not look back, either to his own former discourses, or to the late propositions whereof himself was author, nor to the conferences, consultations, and conclusions thereupon, nor principally to her majesty's royal direction and expectation, nor generally to the conceit both of subjects of this realm, and the rebels themselves in Ireland; but which way soever he turned, he must find himself trusted, directed, and engaged wholly for the northern expedition.

The parts of this that was charged were verified by three proofs: the first, the most authentical but the least pressed, and that was her majesty's own royal affirmation, both by her speech now and her precedent letters; the second, the testimony of the privy council, who upon their honours did avouch the substance of that was charged, and referred themselves also to many of their lordships' letters to the same effect; the third, letters written from my lord after his being in Ireland, whereby the resolution touching the design of the north is often knowledged.

There follow some clauses both of her majesty's letters and of the lords of her council, and of the earl's and the council of Ireland, for the verification of this point.

Her majesty, in her letter of the 19th of July to my Lord of Essex, upon the lingering of the northern journey, doubting my lord did value service, rather by the labour he endured, than by

the advantage of her majesty's royal ends, hath these words:

"You have in this despatch given us small light, either when or in what order you intend particularly to proceed to the northern action; wherein if you compare the time that is run on, and the excessive charges that are spent, with the effects of any thing wrought by this voyage, howsoever we remain satisfied with your own particular cases and travails of body and mind, yet you must needs think that we, that have the eyes of foreign princes upon our actions, and have the hearts of people to comfort and cherish, who groan under the burden of continual levies and impositions, which are occasioned by these late actions, can little please ourself hitherto with any thing that hath been effected."

In another branch of the same letter, reflecting her royal regard upon her own honour interested in this delay, hath these words:

"Whereunto we will add this one thing that doth more displease us than any charge or offence that happens, which is, that it must be the Queen of England's fortune, who hath held down the greatest enemy she had, to make a base bush-kern to be accounted so famous a rebel, as to be a person against whom so many thousands of foot and horse, besides the force of all the nobility of that kingdom, must be thought too little to be employed."

In another branch, discovering, as upon the vantage ground of her princely wisdom, what would be the issue of the courses then held, hath these words:

"And, therefore, although by your letter we found your purpose to go northwards, on which depends the main good of our service, and which we expected long since should have been performed; yet, because we do hear it bruited, besides the words of your letter written with your own hand, which carries some such sense, that you, who allege such sickness in your army by being travelled with you, and find so great and impo tant affairs to digest at Dublin, will yet engage yourself personally into Ophalie, being our lieutenant, when you have there so many inferiors able, might victual a fort, or seek revenge against those who have lately prospered against our forces. And when we call to mind how far the sun hath run his course, and what dependeth upon the timely plantation of garrisons in the north, and how great scandal it would be to our honour to leave that proud rebel unassayed, when we have with so great an expectation of our enemies engaged ourselves so far in the action; so that, without that be done, all those former courses will prove like 'via navis in mari;' besides that our power, which hitherto hath been dreaded by potent enemies, will now even be held contemptible amongst our rebels: we must plainly charge you, according to the duty you owe to us, so to unite soundness of judgment to the zeal you have to do us service, as with all speed to pass thither in such sort, as the axe might be put to the root of that tree, which hath been the treasonable stock from whom so many poisoned plants and grafts have been derived; by which proceedings of yours, we may neither have cause to repent of our employment of yourself for omitting those opportunities to shorten the wars, nor receive in the eye of the world imputation of so much weakness in ourself, to begin a work without better foresight what would be the end of our excessive charge, the adventure of our people's lives, and the holding up of our own greatness against a wretch, whom we have raised from the dust, and who could never prosper, if the charges we have been put to were orderly employed."

Her majesty in her particular letter, written to my lord the 30th of July, bindeth, still expressly upon the northern prosecution, my lord "ad principalia rerum," in these words:

"First, you know right well, when we yielded to this excessive charge, it was upon no other foundation than to which yourself did ever advise us as much as any, which was, to assail the northern traitor, and to plant garrisons in his country; it being ever your firm opinion, amongst other our council, to conclude that all that was done in other kind in Ireland, was but waste and consumption."

Her majesty, in her letter of the 9th of August to my Lord of Essex and the council of Ireland, when, after Munster journey, they began in a new time to dissuade the northern journey in her excellent ear, quickly finding a discord of men from themselves, chargeth them in these words:

"Observe well what we have already written, and apply your counsels to that which may shorten, and not prolong the war; seeing never any of you was of other opinion, than that all other courses were but consumptions, except we went on with the northern prosecution."

The lords of her majesty's council, in their letter of the 10th of August to my Lord of Essex and the council of Ireland, do in plain terms lay before them the first plot, in these words:

"We cannot deny but we did ground our counsels upon this foundation, That there should have been a prosecution of the capital rebels in the north, whereby the war might have been shortened; which resolution, as it was advised by yourself before your going, and assented to by most part of the council of war that were called to the question, so must we confess to your lordship, that we have all this while concurred with her majesty in the same desire and expectation."

My Lord of Essex, and the council of Ireland, in their letter of the 5th of May to the lords of the council before the Munster journey, write "in hæc verba."

"Moreover, in your lordships' great wisdom, you will likewise judge what pride the rebels will grow to, what advantage the foreign enemy may take, and what loss her majesty shall receive, if this summer the arch-traitor be not assailed, and garrisons planted upon him."

My Lord of Essex, in his particular letter of the 11th of July, to the lords of the council, after Munster journey, writeth thus:

"As fast as I can call these troops together, I will go look upon yonder proud rebel, and if I find him on hard ground, and in an open country, though I should find him in horse and foot three for one, yet will I by God's grace dislodge him, or put the council to the trouble of," &c.

The Earl of Essex, in his letter of the 14th of August to the lords of the council, writeth out of great affection, as it seemeth, in these words:

"Yet must these rebels be assailed in the height of their pride, and our base clowns must be taught to fight again: else will her majesty's honour never be recovered, nor our nation valued, nor this kingdom reduced."

Besides, it was noted, that whereas my lord and the council of Ireland, had, by theirs of the 15th of July, desired an increase of 2,000 Irish, purposely for the better setting on foot of the northern service; her majesty, notwithstanding her proportions, by often gradations and risings, had been raised to the highest elevation, yet was pleased to yield unto it.

1. The first part concerneth my lord's ingress into his charge, and that which passed here before his going hence; now followeth an order, both of time and matter, what was done after my lord was gone into Ireland, and had taken upon him the government by her majesty's commission.

2. The second part then of the first article was to show, that my lord did willfully and contemptuously, in this great point of estate, violate and infringe her majesty's direction before remembered.

In delivering of the evidence and proofs of this part, it was laid down for a foundation, that there was a full performance on her majesty's part of all the points agreed upon for this great prosecution, so as there was no impediment or cause of interruption from hence.

This is proved by a letter from my Lord of Essex and the council of Ireland to the lords of the council here, dated 9th May, which was some three weeks after my lord had received the sword, by which time he might well and thoroughly inform himself whether promise were kept in all things or no, and the words of the letter are these:

"As your lordships do very truly set forth, we do very humbly acknowledge her majesty's chargeable magnificence and royal preparations and transportations of men, munition, apparel, money, and victuals, for the recovery of this distressed kingdom;" where note, the transportations acknowledged as well as the preparations.

Next, it was set down for a second ground, that there was no natural nor accidental impediment in the estate of the affairs themselves, against the prosecution upon Tyrone, but only culpable impediments raised by the journey of Munster.

This appeared by a letter from my lord and the council of Ireland to the lords of the council here, dated the 28th of April, whereby they advertise, that the prosecution of Ulster, in regard of lack of grass and forage, and the poorness of cattle at that time of year, and such like difficulties of the season, and not of the matter, will in better time, and with better commodity for the army, be fully executed about the middle of June or beginning of July; and signify, that the earl intended a present prosecution should be set on foot in Lemster: to which letters the lords make answer by theirs of the 8th of May, signifying her majesty's toleration of the delay.

A DECLARATION

OF THE

PRACTICES AND TREASONS,

ATTEMPTED AND COMMITTED BY

ROBERT, LATE EARL OF ESSEX, AND HIS COMPLICES,

AGAINST HER MAJESTY AND HER KINGDOMS;

AND OF THE PROCEEDINGS AS WELL AT THE ARRAIGNMENTS AND CONVICTIONS OF THE SAID LATE EARL, AND HIS ADHERENTS, AS AFTER: TOGETHER WITH THE VERY CONFESSIONS, AND OTHER PARTS OF THE EVIDENCES THEMSELVES, WORD FOR WORD, TAKEN OUT OF THE ORIGINALS.

IMPRINTED ANNO 1601.*

THOUGH public justice passed upon capital offenders, according to the laws, and in course of an honourable and ordinary trial, where the case would have borne and required the severity of martial law to have been speedily used, do in itself carry a sufficient satisfaction towards all men, specially in a merciful government, such as her majesty's is approved to be: yet, because there do pass abroad in the hands of many men divers false and corrupt collections and relations of the proceedings at the arraignment of the late Earls of Essex and Southampton; and, again, because it is requisite that the world do understand as well the precedent practices and inducements to the treasons, as the open and actual treasons themselves, though in a case of life it was not thought convenient to insist at the trial upon matter of inference or presumption, but chiefly upon matter of plain and direct proofs; therefore it hath been thought fit to publish to the world a brief declaration of the practices and treasons attempted and committed by Robert, late Earl of Essex, and his complices against her majesty and her kingdoms, and of the proceedings at the convictions of the said late earl and his adherents upon the same treasons: and not so only, but therewithal, for the better warranting and verifying of the narration, to set down in the end the very confessions and testimonies themselves, word for word, taken out of the originals, whereby it will be most manifest that nothing is obscured or disguised, though it do appear by divers most wicked and seditious libels thrown abroad, that the dregs of these treasons which the late Earl of Essex himself, a little before his death, did term a leprosy, that had infected far and near, do yet remain in the hearts and tongues of some misaffected persons.

The most partial will not deny, but that Robert, late Earl of Essex, was, by her majesty's manifold benefits and graces, besides oath and allegiance, as much tied to her majesty, as the subject could be to the sovereign; her majesty having heaped upon him both dignities, offices, and gifts, in such measure, as within the circle of twelve years, or more, there was scarcely a year of rest, in which he did not obtain at her majesty's hands some notable addition either of honour or profit.

But he on the other side making these her majesty's favours nothing else but wings for his ambition, and looking upon them not as her benefits, but as his advantages, supposing that to be his own metal which was but her mark and impression, was so given over by God, who often punisheth ingratitude by ambition, and ambition by treason, and treason by final ruin, as he had long ago plotted it in his heart to become a dangerous supplanter of that seat, whereof he ought to have been a principal supporter; in such sort as now every man of common sense may discern not only his last actual and open treasons, but also his former more secret practices and preparations towards those his treasons, and that without any gloss or interpreter, but himself and his own doings.

For, first of all, the world can now expound why it was that he did aspire, and had almost attained unto a greatness, like unto the ancient greatness of the "præfectus prætorio" under the emperors of Rome, to have all men of war to make their sole and particular dependence upon him; that with such jealousy and watchfulness

* See ante, 341.

he sought to discountenance any one that might be a competitor to him in any part of that greatness, that with great violence and bitterness he sought to suppress and keep down all the worthiest martial men, which did not appropriate their respects and acknowledgments only towards himself. All which did manifestly detect and distinguish, that it was not the reputation of a famous leader in the wars which he sought, as it was construed a great while, but only power and greatness to serve his own ends, considering he never loved virtue nor valour in another, but where he thought he should be proprietary and commander of it, as referred to himself.

So likewise those points of popularity which every man took notice and note of, as his affable gestures, open doors, making his table and his bed so popularly places of audience to suitors, denying nothing when he did nothing, feeding many men in their discontentments against the queen and the state, and the like; as they were ever since Absalom's time the forerunners of treasons following, so in him were they either the qualities of a nature disposed to disloyalty, or the beginnings and conceptions of that which afterwards grew to shape and form.

But as it were a vain thing to think to search the roots and first motions of treasons, which are known to none but God that discerns the heart, and the devil that gives the instigation; so it is more than to be presumed, being made apparent by the evidence of all the events following, that he carried into Ireland a heart corrupted in his allegiance, and pregnant of those or the like treasons which afterwards came to light.

For being a man by nature of a high imagination, and a great promiser to himself as well as to others, he was confident that if he were once the first person in a kingdom, and a sea between the queen's seat and his, and Wales the nearest land from Ireland, and that he had got the flower of the English forces into his hands, which he thought so to intermix with his own followers, as the whole body should move by his spirit, and if he might have also absolutely into his own hands "potestatem vitæ et necis, et arbitrium belli et pacis," over the rebels of Ireland, whereby he might entice and make them his own, first by pardons and conditions, and after by hopes to bring them in place where they should serve for hope of better booties than cows, he should be able to make that place of lieutenancy of Ireland as a rise or step to ascend to his desired greatness in England.

And although many of these conceits were windy, yet neither were they the less like to his; neither are they now only probable conjectures or comments upon these his last treasons, but the very preludes of actions almost immediately subsequent, as shall be touched in due place.

But, first, it was strange with what appetite and thirst he did affect and compass the government of Ireland, which he did obtain. For although he made some formal shows to put it from him; yet in this, as in most things else, his desires being too strong for his dissimulations, he did so far pass the bounds of decorum, as he did in effect name himself to the queen by such description and such particularities as could not be applied to any other but himself; neither did he so only, but, farther, he was still at hand to offer and urge vehemently and peremptorily exceptions to any other that was named.

Then, after he once found that there was no man but himself, who had other matters in his head, so far in love with that charge, as to make any competition or opposition to his pursuit, whereby he saw it would fall upon him, and especially after himself was resolved upon; he began to make propositions to her majesty by way of taxation of the former course held in managing the actions of Ireland, especially upon three points; the first, that the proportions of forces which had been there maintained and continued by supplies, were not sufficient to bring the prosecutions there to period. The second, that the axe had not been put to the root of the tree, in regard there had not been made a main prosecution upon the arch-traitor, Tyrone, in his own strength, within the province of Ulster. The third, that the prosecutions before time had been intermixed and interrupted with too many temporizing treaties, whereby the rebel did ever gather strength and reputation to renew the war with advantage. All which goodly and well-sounding discourses, together with the great vaunts, that he would make the earth tremble before him, tended but to this, that the queen should increase the list of her army, and all proportions of treasure and other furniture, to the end his commandment might be the greater. For that he never intended any such prosecution, may appear by this, that even at the time before his going into Ireland, he did open himself so far in speech to Blunt, his inwardest counsellor, "That he did assure himself that many of the rebels in Ireland would be advised by him:" so far was he from intending any prosecution towards those in whom he took himself to have interest. But his ends were two; the one, to get great forces into his hands; the other, to oblige the heads of the rebellion unto him, and to make them of his party. These two ends had in themselves a repugnancy; for the one imported prosecution, and the other treaty: but he that meant to be too strong to be called to account for any thing, and meant besides, when he was once in Ireland, to engage himself in other journeys that should hinder the prosecution in the north, took things in order as they made for him; and so first did nothing, as was said, but trumpet a final and utter prosecution against Tyrone in the north, to the end, to have his forces augmented.

But yet he forgat not his other purpose of making himself strong by a party amongst the rebels, when it came to the scanning of the clauses of his commission. For then he did insist, and that with a kind of contestation, that the pardoning, no, not of Tyrone himself, the capital rebel, should be excepted and reserved to her majesty's immediate grace; being infinitely desirous that Tyrone should not look beyond him for his life or pardon, but should hold his fortune as of him, and account for it to him only.

So, again, whereas, in the commission of the Earl of Sussex, and of all other lieutenants or deputies, there was ever in that clause, which giveth unto the lieutenant or deputy that high or regal point of authority to pardon treasons and traitors, an exception contained of such cases of treason as are committed against the person of the king; it was strange, and suspiciously strange even at that time, with what importunity and instance he did labour, and in the end prevailed to have that exception also omitted, glossing then, that because he had heard that, by strict exposition of law, (a point in law that he would needs forget at his arraignment, but could take knowledge of it before, when it was to serve his own ambition,) all treasons of rebellion did tend to the destruction of the king's person, it might breed a buz in the rebels' heads, and so discourage them from coming in: whereas he knew well that in all experience passed, there was never rebel made any doubt or scruple upon that point to accept of pardon from all former governors, who had their commissions penned with that limitation, their commissions being things not kept secretly in a box, but published and recorded: so as it appeared manifestly, that it was a mere device of his own out of the secret reaches of his heart, then not revealed; but it may be shrewdly expounded since, what his drift was, by those pardons which he granted to Blunt the marshal, and Thomas Lee, and others, that his care was no less to secure his own instruments than the rebels of Ireland.

Yet was there another point for which he did contend and contest, which was, that he might not be tied to any opinion of the council of Ireland, as all others in certain points, as pardoning traitors, concluding war and peace, and some other principal articles, had been before him; to the end he might be absolute of himself, and be fully master of opportunities and occasions for the performing and executing of his own treasonable ends.

But after he had once, by her majesty's singular trust and favour toward him, obtained his patent of commission as large, and his list of forces as full as he desired, there was an end in his course of the prosecution in the north. For, being arrived into Ireland, the whole carriage of his actions there was nothing else but a cunning defeating of that journey, with an intent, as appeared, in the end of the year, to pleasure and gratify the rebel with a dishonourable peace, and to contract with him for his own greatness.

Therefore, not long after he had received the sword, he did voluntarily engage himself in an unseasonable and fruitless journey into Munster, a journey never propounded in the council there, never advertised over hither while it was past: by which journey her majesty's forces, which were to be preserved entire, both in vigour and number for the great prosecution, were harassed and tired with long marches together, and the northern prosecution was indeed quite dashed and made impossible.

But, yet, still doubting he might receive from her majesty some quick and express commandment to proceed; to be sure he pursued his former device of wrapping himself in other actions, and so set himself on work anew in the county of Ophaley, being resolved, as is manifest, to dally out the season, and never to have gone that journey at all: that setting forward which he made in the very end of August, being but a mere play and a mockery, and for the purposes which now shall be declared.

After he perceived that four months of the summer, and three parts of the army were wasted, he thought now was a time to set on foot such a peace, as might be for the rebels' advantage, and so to work a mutual obligation between Tyrone and himself; for which purpose he did but seek a commodity. He had there with him in his army one Thomas Lee, a man of a seditious and working spirit, and one that had been privately familiar and entirely beloved of Tyrone, and one that afterwards, immediately upon Essex's open rebellion, was apprehended for a desperate attempt of violence against her majesty's person; which he plainly confessed, and for which he suffered. Wherefore, judging him to be a fit instrument, he made some signification to Lee of such an employment, which was no sooner signified than apprehended by Lee. He gave order also to Sir Christopher Blunt, marshal of his army, to license Lee to go to Tyrone, when he should require it. But Lee thought good to let slip first unto Tyrone, which was, nevertheless, by the marshal's warrant, one James Knowd, a person of wit and sufficiency, to sound in what terms and humours Tyrone then was. This Knowd returned a message from Tyrone to Lee, which was, That if the Earl of Essex would follow Tyrone's plot, he would make the Earl of Essex the greatest man that ever was in England: and, farther, that if the earl would have conference with him, Tyrone would deliver his eldest son in pledge for his assurance. This message was delivered by Knowd to Lee, and by Lee was imparted to the Earl of Essex, who, after this message, employed Lee himself to Tyrone, and by his negotiating,

whatsoever passed else, prepared and disposed Tyrone to the parley.

And this employment of Lee was a matter of that guiltiness in my lord, as, being charged with it at my lord keeper's only in this nature, for the message of Knowd was not then known, that when he pretended to assail Tyrone, he had before underhand agreed upon a parley, my lord utterly denied it that he ever employed Lee to Tyrone at all, and turned it upon Blunt, whom he afterwards required to take it upon him, having before sufficiently provided for the security of all parts, for he had granted both to Blunt and Lee pardons of all treasons under the great seal of Ireland, and so, himself disclaiming it, and they being pardoned, all was safe.

But when that Tyrone was by these means, besides what others, God knows, prepared to demand a parley, now was the time for Essex to acquit himself of all the queen's commandments, and his own promises and undertakings for the northern journey; and not so alone, but to have the glory at the disadvantage of the year, being but 2,500 strong of foot, and 300 of horse, after the fresh disaster of Sir Conyers Clifford, in the height of the rebels' pride, to set forth to assail, and then that the very terror and reputation of my Lord of Essex's person was such as did daunt him, and make him stoop to seek a parley; and this was the end he shot at in that September journey, being a mere abuse and bravery, and but inducements only to the treaty, which was the only matter he intended. For Essex drawing now towards the catastrophe, or last part of that tragedy, for which he came upon the stage in Ireland, his treasons grew to a farther ripeness. For, knowing how unfit it was for him to communicate with any English, even of those whom he trusted most, and meant to use in other treasons, that he had an intention to grow to an agreement with Tyrone, to have succours from him for the usurping upon the state here; (not because it was more dangerous than the rest of his treasons, but because it was more odious, and in a kind monstrous, that he should conspire with such a rebel, against whom he was sent; and therefore might adventure to alienate men's affections from him;) he drave it to this, that there might be, and so there was, under colour of treaty, an interview and private conference between Tyrone and himself only, no third person admitted. A strange course, considering with whom he dealt, and especially considering what message Knowd had brought, which should have made him rather call witnesses to him, than avoid witnesses. But he being only true to his own ends, easily dispensed with all such considerations. Nay, there was such careful order taken, that no person should overhear one word that passed between them two, as, because the place appointed and used for the parley was such, as there was the depth of a brook between them, which made them speak with some loudness, there were certain horsemen appointed by order from Essex, to keep all men off a great distance from the place.

It is true, that the secrecy of that parley, as it gave to him the more liberty of treason, so it may give any man the more liberty of surmise what was then handled between them, inasmuch as nothing can be known, but by report from one of them two, either Essex or Tyrone.

But although there were no proceeding against Essex upon these treasons, and that it were a needless thing to load more treasons upon him then, whose burden was so great after; yet, for truth's sake, it is fit the world know what is testified touching the speeches, letters, and reports of Tyrone, immediately following this conference, and observe also what ensued likewise in the designs of Essex himself.

On Tyrone's part it fell out, that the very day after that Essex came to the court of England, Tyrone having conference with Sir William Warren at Armagh, by way of discourse told him, and bound it with an oath, and iterated it two or three several times; That within two or three months he should see the greatest alterations and strangest that ever he saw in his life, or could imagine: and that he, the said Tyrone, hoped ere long to have a good share in England. With this concurred fully the report of Richard Bremingham, a gentleman of the pale, having made his repair about the same time to Tyrone, to right him in a cause of land; saving that Bremingham delivers the like speech of Tyrone to himself; but not what Tyrone hoped, but what Tyrone had promised in these words, That he had promised, it may be thought to whom, ere long to show his face in England, little to the good of England.

These generalities coming immediately from the report of Tyrone himself, are drawn to more particularity in a conference had between the Lord Fitz-Morrice, Baron of Liksnaw in Munster, and one Thomas Wood, a person well reputed of, immediately after Essex coming into England. In which conference Fitz-Morrice declared unto Wood, that Tyrone had written to the traitorous titulary Earl of Desmond to inform him, that the condition of that contract between Tyrone and Essex was, That Essex should be King of England; and that Tyrone should hold of him the honour and state of Viceroy of Ireland; and that the proportion of soldiers which Tyrone should bring or send to Essex, were 8,000 Irish. With which concurreth fully the testimony of the said James Knowd, who, being in credit with Owny Mac Roory, chief of the Omoores in Lemster, was used as a secretary for him, in the writing of a letter of Tyrone, immediately after Essex coming into England. The effect of which letter was, To understand some light of the secret agreement between the Earl of Essex and Tyrone,

that he, the said Owny, might frame his course accordingly. Which letter, with farther instructions to the same effect, was, in the presence of Knowd, delivered to Turlagh Macdauy, a man of trust with Owny, who brought an answer from Tyrone: the contents whereof were, That the Earl of Essex had agreed to take his part, and that they should aid him towards the conquest of England.

Besides, very certain it is, and testified by divers credible persons, that immediately upon this parley, there did fly abroad, as sparkles of this fire, which it did not concern Tyrone so much to keep secret, as it did Essex, a general and received opinion, that went up and down in the mouths both of the better and meaner sort of rebels; That the Earl of Essex was theirs, and they his; and that he would never leave the one sword, meaning that of Ireland, till he had gotten the other in England; and that he would bring them to serve, where they should have other manner of booties than cows; and the like speeches. And Thomas Lee himself, who had been, as was before declared, with Tyrone two or three days, upon my lord's sending, and had sounded him, hath left it confessed under his hand; That he knew the Earl of Essex and Tyrone to be one, and to run the same courses.

And certain it is also, that immediately upon that parley, Tyrone grew into a strange and unwonted pride, and appointed his progresses and visitations to receive congratulations and homages from his confederates, and behaved himself in all things as one that had some new spirit of hope and courage put into him.

But on the Earl of Essex his part ensued immediately after this parley a strange motion and project, which, though no doubt he had harboured in his breast before; yet, for any thing yet appeareth, he did not utter and break with any in it, before he had been confirmed and fortified in his purpose, by the combination and correspondence which he found in Tyrone upon their conference. Neither is this a matter gathered out of reports, but confessed directly by two of his principal friends and associates, being witnesses upon their own knowledge, and of that which was spoken to themselves: the substance of which confession is this: That a little before my lord's coming over into England, at the castle of Dublin, where Sir Christopher Blunt lay hurt, having been lately removed thither from Rheban, a castle of Thomas Lee's, and placed in a lodging that had been my Lord of Southampton's; the Earl of Essex took the Earl of Southampton with him to visit Blunt, and there being none present but they three, my Lord of Essex told them, he found it now necessary for him to go into England, and would advise with them of the manner of his going, since to go he was resolved. And thereupon propounded unto them, that he thought it fit to carry with him of the army in Ireland as much as he could conveniently transport, at least the choice of it, to the number of two or three thousand, to secure and make good his first descent on shore, purposing to land them at Milford-Haven in Wales, or thereabouts: not doubting, but that his army would so increase within a small time, by such as would come in to him, as he should be able to march with his power to London, and make his own conditions as he thought good. But both Southampton and Blunt dissuaded him from this enterprise; Blunt alleging the hazard of it, and that it would make him odious: and Southampton utterly disliking of that course, upon the same and many other reasons. Howbeit, thereupon Blunt advised him rather to another course, which was to draw forth of the army some 200 resolute gentlemen, and with those to come over, and so to make sure of the court, and so to make his own conditions. Which confessions it is not amiss to deliver, by what a good providence of God they came to light: for they could not be used at Essex's arraignment to charge him, because they were uttered after his death.

But Sir Christopher Blunt at his arraignment, being charged that the Earl of Essex had set it down under his hand, that he had been a principal instigator of him to his treasons, in passion brake forth into these speeches: That then he must be forced to disclose what farther matters he had held my lord from, and desired for that purpose, because the present proceeding should not be interrupted, to speak with the Lord Admiral and Mr. Secretary after his arraignment, and so fell most naturally, and most voluntarily into this his confession, which, if it had been thought fit to have required of him at that time publicly, he had delivered before his conviction. And the same confession he did after, at the time of his execution, constantly and fully confirm, discourse particularly, and take upon his death, where never any man showed less fear, nor a greater resolution to die.

And the same matter, so by him confessed, was likewise confessed with the same circumstances of time and place by Southampton, being severally examined thereupon.

So as now the world may see how long since my lord put off his vizard, and disclosed the secrets of his heart to two of his most confident friends, falling upon that unnatural and detestable treason, whereunto all his former actions in his government in Ireland, and God knows how long before, were but introductions.

But finding that these two persons, which of all the rest he thought to have found forwardest, Southampton, whose displacing he had made his own discontentment, having placed him no question to that end, to find cause of discontentment, and Blunt, a man so enterprising and prodigal of

his own life, as himself termed himself at the bar, did not applaud to this his purpose, and thereby doubting how coldly he should find others minded, that were not so near to him; and, therefore, condescending to Blunt's advice to surprise the court, he did pursue that plot accordingly, and came over with a selected company of captains and voluntaries, and such as he thought were most affectionate unto himself, and most resolute, though not knowing of his purpose. So as even at that time every man noted and wondered what the matter should be, that my lord took his most particular friends and followers from their companies, which were countenance and means unto them, to bring them over. But his purpose, as in part was touched before, was this; that if he held his greatness in court, and were not committed, which, in regard of the miserable and deplored estate he left Ireland in, whereby he thought the opinion here would be that his service could not be spared, he made full account he should not be, then, at the first opportunity, he would execute the surprise of her majesty's person. And if he were committed to the Tower, or to prison, for his contempts, for, besides his other contempts, he came over expressly against the queen's prohibition under her signet, it might be the care of some of his principal friends, by the help of that choice and resolute company which he brought over, to rescue him.

But the pretext of his coming over was, by the efficacy of his own presence and persuasion to have moved and drawn her majesty to accept of such conditions of peace as he had treated of with Tyrone in his private conference; which was indeed somewhat needful, the principal article of them being, That there should be a general restitution of rebels in Ireland to all their lands and possessions, that they could pretend any right to before their going out into rebellion, without reservation of such lands, as were by act of parliament passed to the crown, and so planted with English, both in the time of Queen Mary, and since; and without difference either of time of their going forth, or nature of their offence, or other circumstance: tending in effect to this, that all the queen's good subjects, in most of the provinces, should have been displanted, and the country abandoned to the rebels.

When this man was come over, his heart thus fraughted with treasons, and presented himself to her majesty; it pleased God, in his singular providence over her majesty, to guide and hem in her proceeding towards him in a narrow way of safety between two perils. For neither did her majesty leave him at liberty, whereby he might have commodity to execute his purpose; nor restrain him in any such nature, as might signify or betoken matter of despair of his return to court and favour. And so the means of present mischief being taken away, and the humours not stirred, this matter fell asleep, and the thread of his purposes was cut off. For coming over about the end of September, and not denied access and conference with her majesty, and then being commanded to his chamber at court for some days, and from thence to the lord keeper's house, it was conceived that these were no ill signs. At my lord keeper's house he remained till some few days before Easter, and then was removed to his own house, under the custody of Sir Richard Barkley, and in that sort continued till the end of Trinity term following.

For her majesty, all this while looking into his faults with the eye of her princely favour, and loath to take advantage of his great offences, in other nature than as contempts, resolved so to proceed against him, as might, to use her majesty's own words, tend "ad correctionem, et non ad ruinam."

Nevertheless, afterwards, about the end of Trinity term the following, for the better satisfaction of the world, and to repress seditious bruits and libels which were dispersed in his justification, and to observe a form of justice before he should be set at full liberty; her majesty was pleased to direct, that there should be associated unto her privy council some chosen persons of her nobility, and of her judges of the law, and before them his cause, concerning the breaking of his instructions for the northern prosecution, and the manner of his treating with Tyrone, and his coming over, and leaving the kingdom of Ireland contrary to her majesty's commandment, expressed as well by signification thereof, made under her royal hand and signet, as by a most binding and effectual letter written privately to himself, to receive a hearing; with limitation, nevertheless, that he should not be charged with any point of disloyalty; and with like favour directed, that he should not be called in question in the open and ordinary place of offenders, in the Star Chamber, from which he had likewise, by a most penitent and humble letter, desired to be spared, as that which would have wounded him forever, as he affirmed, but in a more private manner, at my lord keeper's house. Neither was the effect of the sentence, that there passed against him, any more than a suspension of the exercise of some of his places: at which time also, Essex, that could vary himself into all shapes for a time, infinitely desirous, as by the sequel now appeareth, to be at liberty to practise and revive his former purposes, and hoping to set into them with better strength than ever, because he conceived the people's hearts were kindled to him by his troubles, and that they had made great demonstrations of as much; he did transform himself into such a strange and dejected humility, as if he had been no man of this world, with passionate protestations that he called God to witness, That he had made an utter divorce with the world; and

he desired her majesty's favour not for any worldly respect, but for a preparative for a "Nunc dimittis;" and that the tears of his heart had quenched in him all humours of ambition. All this to make her majesty secure, and to lull the world asleep, that he was not a man to be held any ways dangerous.

Not many days after, Sir Richard Barkley, his keeper, was removed from him, and he set at liberty with this admonition only, that he should not take himself to be altogether discharged, though he were left to the guard of none but his own discretion. But he felt himself no sooner upon the wings of his liberty, but, notwithstanding his former shows of a mortified estate of mind, he began to practise afresh as busily as ever, reviving his former resolution; which was the surprising and possessing the queen's person and the court. And that it may appear how early after his liberty he set his engines on work, having long before entertained into his service, and during his government in Ireland drawn near unto him in the place of his chief secretary, one Henry Cuffe, a base fellow by birth, but a great scholar, and indeed a notable traitor by the book, being otherwise of a turbulent and mutinous spirit against all superiors.

This fellow, in the beginning of August, which was not a month after Essex had liberty granted, fell of practising with Sir Henry Nevil, that served her majesty as lieger ambassador with the French king, and then newly come over into England from Bulloign, abusing him with a false lie and mere invention, that his service was blamed and misliked, and that the imputation of the breach of the treaty of peace held at Bulloign was like to light upon him, when there was no colour of any such matter, only to distaste him of others, and to fasten him to my lord, though he did not acquaint him with any particulars of my lord's designs till a good while after.

But my lord having spent the end of the summer, being a private time, when everybody was out of town and dispersed, in digesting his own thoughts, with the help and conference of Mr. Cuffe, they had soon set down between them the ancient principle of traitors and conspirators, which was, to prepare many, and to acquaint few; and, after the manner of miners, to make ready their powder, and place it, and then give fire but in the instant. Therefore, the first consideration was of such persons as my lord thought fit to draw to be of his party; singling out both of nobility and martial men, and others, such as were discontented or turbulent, and such as were weak of judgment, and easy to be abused, or such as were wholly dependents and followers, for means or countenance, of himself, Southampton, or some other of his greatest associates.

And knowing there were no such strong and drawing cords of popularity as religion, he had not neglected, both at this time and long before, in a profane policy to serve his turn, for his own greatness, of both sorts and factions, both of Catholics and Puritans, as they term them, turning his outside to the one, and his inside to the other; and making himself pleasing and gracious to the one sort by professing zeal, and frequenting sermons, and making much of preachers, and secretly underhand giving assurance to Blunt, Davis, and divers others, that, if he might prevail in his desired greatness, he would bring in a toleration of the Catholic religion.

Then having passed the whole Michaelmas term in making himself plausible, and in drawing concourse about him, and in affecting and alluring men by kind provocations and usage, wherein, because his liberty was qualified, he neither forgot exercise of mind nor body, neither sermon nor tennis-court, to give the occasion and freedom of access and concourse unto him, and much other practice and device; about the end of that term, towards Christmas, he grew to a more framed resolution of the time and manner, when and how he would put his purpose in execution. And first, about the end of Michaelmas term, it passed as a kind of cipher and watch-word among his friends and followers, That my lord would stand upon his guard; which might receive construction, in a good sense, as well guard of circumspection, as guard of force: but to the more private and trusty persons he was content it should be expounded that he would be cooped up no more, nor hazard any more restraints or commandments.

But the next care was how to bring such persons, as he thought fit for his purpose, into town together, without vent or suspicion, to be ready at the time, when he should put his design in execution; which he had concluded should be some time in Hilary term; wherein he found many devices to draw them up, some for suits in law, and some for suits in court, and some for assurance of land: and one friend to draw up another, it not being perceived that all moved from one head. And it may be truly noted, that in the catalogue of those persons that were the eighth of February in the action of open rebellion, a man may find almost out of every country of England some; which could not be by chance or constellation: and in the particularity of examinations, too long to be rehearsed, it was easy to trace in what sort many of them were brought up to town, and held in town upon several pretences. But in Candlemas term, when the time drew near, then was he content consultation should be had by certain choice persons, upon the whole matter and course which he should hold. And because he thought himself and his own house more observed, it was thought fit that the meeting and conference should be at

Drury House, where Sir Charles Davers lodged. There met at this council, the Earl of Southampton, with whom in former times he had been at some emulations and differences in court: but after, Southampton having married his kinswoman, and plunged himself wholly into his fortune, and being his continual associate in Ireland, he accounted of him as most assured unto him, and had long ago in Ireland acquainted him with his purpose, as was declared before: Sir Charles Davers, one exceedingly devoted to the Earl of Southampton, upon affection begun first upon the deserving of the same earl towards him, when he was in trouble about the murder of one Long: Sir Ferdinando Gorge, one that the Earl of Essex had of purpose sent for up from his government at Plymouth by his letter, with particular assignation to be here before the second of February: Sir John Davis, one that had been his servant, and raised by him, and that bare office in the Tower, being surveyor of the ordnance, and one that he greatly trusted: and John Littleton, one they respected for his wit and valour.

The consultation and conference rested upon three parts: the perusal of a list of those persons, whom they took to be of their party; the consideration of the action itself which they should set afoot, and how they should proceed in it; and the distribution of the persons, according to the action concluded on, to their several employments.

The list contained the number of sixscore persons, noblemen, and knights, and principal gentlemen, and was, for the more credit's sake, of the Earl of Essex's own handwriting.

For the action itself, there was proposition made of two principal articles: the one of possessing the Tower of London; the other of surprising her majesty's person and the court; in which also deliberation was had, what course to hold with the city, either towards the effecting of the surprise, or after it was effected.

For the Tower, was alleged the giving a reputation to the action, by getting into their hand the principal fort of the realm, with the stores and provisions thereunto appertaining, the bridling of the city by that piece, and commodity of entrance in and possessing it, by the means of Sir John Davis. But this was by opinion of all rejected, as that which would distract their attempt from the more principal, which was the court, and as that which they made a judgment would follow incidently, if the court were once possessed.

But the latter, which was the ancient plot, as was well known to Southampton, was in the end, by the general opinion of them all, insisted and rested upon.

And the manner how it should be ordered and disposed was this: That certain selected persons of their number, such as were well known in court, and might have access, without check or suspicion, into the several rooms in court, according to the several qualities of the persons, and the differences of the rooms, should distribute themselves into the presence, the guard-chamber, the hall, and the utter court and gate, and some one principal man undertaking every several room, with the strength of some few to be joined with him, every man to make good his charge, according to the occasion. In which distribution, Sir Charles Davers was then named to the presence, and to the great chamber, where he was appointed, when time should be, to seize upon the halberds of the guard; Sir John Davis to the hall; and Sir Christopher Blunt to the utter gate; these seeming to them the three principal wards of consideration: and that things being within the court in a readiness, a signal should be given and sent to Essex, to set forward from Essex House, being no great distance off. Whereupon Essex, accompanied with the noblemen of his party, and such as should be prepared and assembled at his house for that purpose, should march towards the court; and that the former conspirators already entered should give correspondence to them without, as well by making themselves masters of the gates to give them entrance, as by attempting to get into their hand upon the sudden the halberds of the guard, thereby hoping to prevent any great resistance within, and by filling all full of tumult and confusion.

This being the platform of their enterprise, the second act of this tragedy was also resolved, which was, that my lord should present himself to her majesty, as prostrating himself at her feet, and desire the remove of such persons as he called his enemies from about her. And after that my lord had obtained possession of the queen, and the state, he should call his pretended enemies to a trial upon their lives, and summon a parliament, and alter the government, and obtain to himself and his associates such conditions as seemed to him and them good.

There passed a speech also in this conspiracy of possessing the city of London, which Essex himself, in his own particular and secret inclination, had ever a special mind unto: not as a departure or going from his purpose of possessing the court, but as an inducement and preparative to perform it upon a surer ground; an opinion bred in him, as may be imagined, partly by the great overweening he had of the love of the citizens; but chiefly, in all likelihood, by a fear, that although he should have prevailed in getting her majesty's person into his hands for a time, with his two or three hundred gentlemen, yet the very beams and graces of her majesty's magnanimity and prudent carriage in such disaster, working with the natural instinct of loyalty, which, of course, when fury is over, doth ever revive in the hearts of subjects of any good blood or mind, such

as his troop for the more part was compounded of, though by him seduced and bewitched, would quickly break the knot, and cause some disunion and separation amongst them, whereby he might have been left destitute, except he should build upon some more popular number, according to the nature of all usurping rebels, which do ever trust more in the common people, than in persons of sort or quality. And this may well appear by his own plot in Ireland, which was to have come with the choice of the army, from which he was diverted, as before is showed. So as his own courses inclined ever to rest upon the main strength of the multitude, and not upon surprises, or the combinations of a few.

But to return: these were the resolutions taken at that consultation, held by these five at Drury House, some five or six days before the rebellion, to be reported to Essex, who ever kept in himself the binding and directing voice: which he did to prevent all differences that might grow by dissent or contradiction. And, besides, he had other persons, which were Cuffe and Blunt, of more inwardness and confidence with him than these, Southampton only excepted, which managed that consultation. And, for the day of the enterprise, which is that must rise out of the knowledge of all the opportunities and difficulties, it was referred to Essex his own choice and appointment; it being, nevertheless, resolved, that it should be some time before the end of Candlemas term.

But this council and the resolutions thereof, were in some points refined by Essex, and Cuffe, and Blunt: for, first, it was thought good, for the better making sure of the utter gate of the court, and the greater celerity and suddenness, to have a troop at receipt to a competent number, to have come from the Mews, where they should have been assembled without suspicion in several companies, and from thence cast themselves in a moment upon the court gate, and join with them which are within, while Essex with the main of his company were making forward.

It was also thought fit, that because they would be commonwealth's men, and foresee, that the business and service of the public state should not stand still; they should have ready at court, and at hand, certain other persons to be offered, to supply the offices and places of such her majesty's counsellors and servants, as they should demand to be removed and displaced.

But chiefly it was thought good, that the assembling of their companies together should be upon some plausible pretext: both to make divers of their company, that understood not the depth of the practices, the more willing to follow them; and to engage themselves, and to gather them together the better without peril of detecting or interrupting: and, again, to take the court the more unprovided, without any alarm given. So as now there wanted nothing but the assignation of the day: which, nevertheless, was resolved indefinitely to be before the end of the term, as was said before, for the putting in execution of this most dangerous and execrable treason. But God, who had in his divine providence long ago cursed this action with the curse that the psalm speaketh of, "That it should be like the untimely fruit of a woman, brought forth before it came to perfection," so disposed above, that her majesty, understanding by a general charm and muttering of the great and universal resort to Essex House, contrary to her princely admonition, and somewhat differing from his former manner, as there could not be so great fire without some smoke, upon the seventh of February, the afternoon before this rebellion, sent to Essex House Mr. Secretary Herbert, to require him to come before the lords of her majesty's council, then sitting in council at Salisbury-court, being the lord treasurer's house: where it was only intended, that he should have received some reprehension, for exceeding the limitations of his liberty, granted to him in a qualified manner, without any intention towards him of restraint; which he, under colour of not being well, excused to do: but his own guilty conscience applying it, that his trains were discovered, doubting peril in any farther delay, determined to hasten his enterprise, and to set it on foot the next day.

But then again, having some advertisement in the evening, that the guards were doubled at court, and laying that to the message he had received overnight; and so concluding that alarm was taken at court, he thought it to be in vain to think of the enterprise of the court, by way of surprise: but that now his only way was, to come thither in strength, and to that end first to attempt the city: wherein he did but fall back to his own former opinion, which he had in no sort neglected, but had formerly made some overtures to prepare the city to take his part; relying himself, besides his general conceit, that himself was the darling and minion of the people, and specially of the city, more particularly upon assurance given of Thomas Smith, then sheriff of London, a man well beloved amongst the citizens, and one that had some particular command of some of the trained forces of the city, to join with him. Having therefore concluded upon this determination, now was the time to execute in fact all that he had before in purpose digested.

First, therefore, he concluded of a pretext which was ever part of the plot, and which he had meditated upon and studied long before. For finding himself, thanks be to God, to seek, in her majesty's government, of any just pretext in matter of state, either of innovation, oppression, or any unworthiness: as in all his former discontentments he had gone the beaten path of traitors, turning their imputation upon counsellors, and persons of credit with their sovereign;

so now he was forced to descend to the pretext of a private quarrel, giving out this speech, how that evening, when he should have been called before the lords of the council, there was an ambuscade of musketeers placed upon the water, by the device of my Lord Cobham and Sir Walter Raleigh, to have murdered him by the way as he passed: a matter of no probability; those persons having no such desperate estates or minds, as to ruin themselves and their posterity, by committing so odious a crime.

But, contrariwise, certain it is, Sir Ferdinando Gorge accused Blunt, to have persuaded him to kill, or at least apprehend Sir Walter Raleigh; the latter whereof Blunt denieth not, and asked Sir Walter Raleigh forgiveness at the time of his death.

But this pretext, being the best he had, was taken: and then did messages and warnings fly thick up and down to every particular nobleman and gentleman, both that evening and the next morning, to draw them together in the forenoon to Essex House, dispersing the foresaid fable, That he should have been murdered; save that it was sometime on the water, sometime in his bed, varying according to the nature of a lie. He sent likewise the same night certain of his instruments, as, namely, one William Temple, his secretary, into the city to disperse the same tale, having increased it some few days before by an addition, That he should have been likewise murdered by some Jesuits, to the number of four: and to fortify this pretext, and to make the more bux of the danger he stood in, he caused that night a watch to be kept all night long, towards the street, in his house. The next morning, which was Sunday, they came unto him of all hands, according to his messages and warnings: of the nobility, the Earls of Rutland, Southampton, and the Lord Sands, and Sir Henry Parker, commonly called the Lord Mountegle; besides divers knights and principal gentlemen and their followers, to the number of some three hundred. And also it being Sunday, and the hour when he had used to have a sermon at his house, it gave cause to some and colour to others to come upon that occasion. As they came, my lord saluted and embraced, and to the generality of them gave to understand, in as plausible terms as he could, That his life had been sought, and that he meant to go to the court and declare his griefs to the queen, because his enemies were mighty, and used her majesty's name and commandment; and desired their help to take his part; but unto the more special persons, he spake high, and in other terms, telling them, That he was sure of the city, and would put himself into that strength, that her majesty should not be able to stand against him, and that he would take revenge of his enemies.

All the while after eight of the clock in the morning, the gates to the street and water were strongly guarded, and men taken in and let forth by discretion of those that held the charge, but with special caution of receiving in such as came from court, but not suffering them to go back without my lord's special direction, to the end no particularity of that which passed there might be known to her majesty.

About ten of the clock, her majesty having understanding of this strange and tumultuous assembly at Essex House, yet in her princely wisdom and moderation thought to cast water upon this fire before it brake forth to farther inconvenience: and therefore using authority before she would use force, sent unto him four persons of great honour and place, and such as he ever pretended to reverence and love, to offer him justice for any griefs of his, but yet to lay her royal commandment upon him to disperse his company, and upon them to withdraw themselves.

These four honourable persons, being the Lord Keeper of the Great Seal of England, the Earl of Worcester, the Comptroller of her Majesty's Household, and the Lord Chief Justice of England, came to the house, and found the gates shut upon them. But after a little stay, they were let in at the wicket; and as soon as they were within, the wicket was shut, and all their servants kept out, except the bearer of the seal. In the court they found the earls with the rest of the company, the court in a manner full, and upon their coming towards Essex, they all flocked and thronged about them; whereupon the lord keeper in an audible voice delivered to the earl the queen's message, That they were sent by her majesty to understand the cause of this their assembly, and to let them know that if they had any particular cause of griefs against any persons whatsoever, they should have hearing and justice.

Whereupon the Earl of Essex, in a very loud and furious voice, declared, That his life was sought, and that he should have been murdered in his bed, and that he had been perfidiously dealt withal; and other speeches to the like effect. To which the lord chief justice said, If any such matter were attempted or intended against him, it was fit for him to declare it, assuring him both a faithful relation on their part, and that they could not fail of a princely indifferency and justice on her majesty's part.

To which the Earl of Southampton took occasion to object the assault made upon him by the Lord Gray: which my lord chief justice returned upon him, and said, That in that case justice had been done, and the party was in prison for it.

Then the lord keeper required the Earl of Essex, that if he would not declare his griefs

openly, yet that then he would impart them privately; and then they doubted not to give him or procure him satisfaction.

Upon this there arose a great clamour among the multitude: "Away, my lord, they abuse you, they betray you, they undo you, you lose time." Whereupon my lord keeper put on his hat, and said with a louder voice than before, "My lord, let us speak with you privatèly, and understand your griefs; and I do command you all upon your allegiance, to lay down your weapons and to depart." Upon which words the Earl of Essex and all the rest, as disdaining commandment, put on their hats; and Essex somewhat abruptly went from him into the house, and the counsellors followed him, thinking he would have private conference with them, as was required.

And as they passed through the several rooms, they might hear many of the disordered company cry, "Kill them, kill them;" and others crying, "Nay, but shop them up, keep them as pledges, cast the great seal out at the window;" and other such audacious and traitorous speeches. But Essex took hold of the occasion and advantage, to keep in deed such pledges if he were distressed, and to have the countenance to lead them with him to the court, especially the two great magistrates of justice, and the great seal of England, if he prevailed, and to deprive her majesty of the use of their counsel in such a strait, and to engage his followers in the very beginning by such a capital act, as the imprisonment of counsellors carrying her majesty's royal commandment for the suppressing of a rebellious force.

And after that they were come up into his book-chamber, he gave order they should be kept fast, giving the charge of their custody principally to Sir John Davis, but adjoined unto him a warder, one Owen Salisbury, one of the most seditious and wicked persons of the number, having been a notorious robber, and one that served the enemy under Sir William Stanley, and that bare a special spleen unto my lord chief justice; who guarded these honourable persons with muskets charged, and matches ready fired at the chamber door.

This done, the earl, notwithstanding my lord keeper still required to speak with him, left the charge of his house with Sir Gilly Merick; and, using these words to my lord keeper, "Have patience for a while, I will go take order with the mayor and sheriffs for the city, and be with you again within half an hour;" issued with his troop into London, to the number of two hundred, besides those that remained in the house, choice men for hardiness and valour, unto whom some gentlemen and one nobleman did after join themselves.

But from the time he went forth, it seems God did strike him with the spirit of amazement, and brought him round again to the place whence he first moved.

For after he had once by Ludgate entered into the city, he never had so much as the heart or assurance to speak any set or confident speech to the people, (but repeated only over and over his tale as he passed by, that he should have been murdered,) nor to do any act of foresight or courage; but he that had vowed he would never be cooped up more, cooped himself first within the walls of the city, and after within the walls of a house, as arrested by God's justice as an example of disloyalty. For passing through Cheapside, and so towards Smith's house, and finding, though some came about him, yet none joined or armed with him, he provoked them by speeches as he passed to arm, telling them, They did him hurt and no good, to come about him with no weapons.

But there was not in so populous a city, where he thought himself held so dear, one man, from the chiefest citizen to the meanest artificer or prentice, that armed with him: so as being extremely appalled, as divers that happened to see him then might visibly perceive in his face and countenance, and almost moulten with sweat, though without any cause of bodily labour but only by the perplexity and horror of his mind, he came to Smith's house the sheriff, where he refreshed himself a little, and shifted him.

But the mean while it pleased God, that her majesty's directions at court, though in a case so strange and sudden, were judicial and sound. For first there was commandment in the morning given unto the city, that every man should be in a readiness, both in person and armour, but yet to keep within his own door, and to expect commandment; upon a reasonable and politic consideration, that had they armed suddenly in the streets, if there were any ill disposed persons, they might arm on the one side and turn on the other, or at least, if armed men had been seen to and fro, it would have bred a greater tumult, and more bloodshed; and the nakedness of Essex's troop would not have so well appeared.

And soon after, direction was given that the Lord Burghley, taking with him the king of heralds, should declare him traitor in the principal parts of the city; which was performed with good expedition and resolution, and the loss and hurt of some of his company. Besides that, the Earl of Cumberland, and Sir Thomas Gerard, knight-marshal, rode into the city, and declared and notified to the people that he was a traitor: from which time divers of his troop withdrawing from him, and none other coming in to him, there was nothing but despair. For having stayed a while, as is said, at Sheriff Smith's house, and there changing his pretext of a private quarrel, and publishing, that the realm should have been sold to the Infanta, the better to spur

on the people to rise, and called, and given commandment to have arms brought and weapons of all sorts, and being soon after advertised of the proclamation, he came forth in a hurry.

So having made some stay in Gracechurch-street, and being dismayed upon knowledge given to him that forces were coming forwards against him under the conduct of the lord admiral, the lieutenant of her majesty's forces; and not knowing what course to take, he determined in the end to go back towards his own house, as well in hope to have found the counsellors there, and by them to have served some turn, as upon trust that towards night his friends in the city would gather their spirits together, and rescue him, as himself declared after to the lieutenant of the Tower.

But, for the counsellors, it had pleased God to make one of the principal offenders his instrument for their delivery; who, seeing my lord's case desperate, and contriving how to redeem his fault and save himself, came to Sir John Davis, and Sir Gilly Merick, as sent from my lord; and so procured them to be released.

But the Earl of Essex, with his company that was left, thinking to recover his house, made on by land towards Ludgate; where being resisted by a company of pikemen and other forces, gathered together by the wise and diligent care of the Bishop of London, and commanded by Sir John Luson, and yet attempting to clear the passage, he was with no great difficulty repulsed. At which encounter Sir Christopher Blunt was sore wounded, and young Tracy slain on his part; and one Waits on the queen's part, and some others. Upon which repulse he went back and fled towards the water-side, and took boat at Queenhithe, and so was received into Essex House at the water-gate, which he fortified and barricadoed; but instantly the lord-lieutenant so disposed his companies, as all passage and issue forth was cut off from him both by land and by water, and all succours that he might hope for were discouraged: and leaving the Earl of Cumberland, the Earl of Lincoln, the Lord Thomas Howard, the Lord Gray, the Lord Burghley, and the Lord Compton, Sir Walter Raleigh, Sir Thomas Gerard, with divers others, before the house to landward, my lord lieutenant himself thought good, taking with him the Lord of Effingham, Lord Cobham, Sir John Stanhope, Sir Robert Sidney, M. Foulk Grevill, with divers others, to assail the garden and banqueting-house on the water-side, and presently forced the garden, and won to the walls of the house, and was ready to have assailed the house; but out of a Christian and honourable consideration, understanding that there were in the house the Countess of Essex, and the Lady Rich, with their gentlewomen, let the Earl of Essex know by Sir Robert Sidney, that he was content to suffer the ladies and gentlewomen to come forth. Whereupon Essex returning the lord lieutenant thanks for the compassion and care he had of the ladies, desired only to have an hour's respite to make way for their going out, and an hour after to barricado the place again: which, because it could make no alteration to the hindrance of the service, the lord lieutenant thought good to grant. But Essex, having had some talk within of a sally, and despairing of the success, and thinking better to yield himself, sent word, that upon some conditions he would yield.

But the lord lieutenant utterly refusing to hear of capitulation, Essex desired to speak with my lord, who thereupon went up close to the house; and the late Earls of Essex and Southampton, with divers other lords and gentlemen their partakers, presented themselves upon the leads; and Essex said, he would not capitulate, but entreat; and made three petitions. The first, that they might be civilly used: whereof the lord lieutenant assured them. The second, that they might have an honourable trial: whereof, the lord lieutenant answered, they needed not to doubt. The third, that he might have Ashton, a preacher, with him in prison, for the comfort of his soul; which the lord lieutenant said he would move to her majesty, not doubting of the matter of his request, though he could not absolutely promise him that person. Whereupon they all, with the ceremony amongst martial men accustomed, came down and submitted themselves, and yielded up their swords, which was about ten of the clock at night; there having been slain in holding of the house, by musket-shot, Owen Salisbury, and some few more on the part of my lord, and some few likewise slain and hurt on the queen's part: and presently, as well the lords as the rest of their confederates of quality, were severally taken into the charge of divers particular lords and gentlemen, and by them conveyed to the Tower and other prisons.

So as this action, so dangerous in respect of the person of the leader, the manner of the combination, and the intent of the plot, brake forth and ended within the compass of twelve hours, and with the loss of little blood, and in such sort as the next day all courts of justice were open, and did sit in their accustomed manner, giving good subjects and all reasonable men just cause to think, not the less of the offender's treason, but the more of her majesty's princely magnanimity and prudent foresight in so great a peril, and chiefly of God's goodness, that hath blessed her majesty in this, as in many things else, with so rare and divine felicity.

The effect of the evidence given at the several arraignments of the late Earls of Essex *and* Southampton, *before the lord steward; and of Sir* Christopher Blunt, *and Sir* Charles

DAVERS, *and others, before great and honourable Commissioners of Oyer and Terminer: and of the answers and defences which the said offenders made for themselves; and the replies made upon such their defences: with some other circumstances of the proceedings, as well at the same arraignments as after.*

The two late Earls of Essex and Southampton were brought to their trial the nineteenth of February, eleven days after the rebellion. At which trial there passed upon them twenty-five peers, a greater number than hath been called in any former precedent. Amongst whom her majesty did not forbear to use many that were of near alliance and blood to the Earl of Essex, and some others, that had their sons and heirs apparent that were of his company, and followed him in the open action of rebellion. The lord steward then in commission, according to the solemnity in such trials received, was the Lord Buckhurst, lord high treasurer, who with gravity and temperance directed the evidence, and moderated, and gave the judgment. There was also an assistance of eight judges, the three chief, and five others. The hearing was with great patience and liberty: the ordinary course not being held, to silence the prisoners till the whole state of the evidence was given in; but they being suffered to answer articulately to every branch of the evidence, and sometimes to every particular deposition, whensoever they offered to speak: and not so only, but they were often spared to be interrupted, even in their digressions and speeches not much pertinent to their cause. And always when any doubt in law was moved, or when it was required either by the prisoners or the peers, the lord steward required the judges to deliver the law; who gave their opinions severally, not barely yea or no, but at large with their reasons.

In the indictment were not laid or charged the treasons of Ireland, because the greatest matter, which was the design to bring over the army of Ireland, being then not confessed nor known; it was not thought convenient to stuff the indictment with matters which might have been conceived to be chiefly gathered by curious inquisition, and grounded upon report or presumption, when there was other matter so notorious. And, besides, it was not unlikely, that in his case, to whom many were so partial, some, who would not consider how things came to light by degrees, might have reported that he was twice called in question about one offence. And, therefore, the late treasons of his rebellion and conspiracy were only comprehended in the indictment, with the usual clauses and consequents in law, of compassing the queen's death, destruction, and deprivation, and levying war, and the like.

The evidence consisted of two parts: the plot of surprising her majesty's person in court, and the open rebellion in the city.

The plot was opened according to the former narration, and proved by the several confessions of four witnesses, fully and directly concurring in the point; Sir Christopher Blunt, Sir Charles Davers, Sir John Davis, and Sir Ferdinando Gorge. Of which number, though Sir Christopher Blunt were not at the council held at Drury House, no more than Essex himself was; yet, he was privy to that which passed. Sir Ferdinando Gorge being prisoner in the Gatehouse, near the place of trial, was, at the request of the Earl of Essex, brought thither, and avouched "viva voce" his confession in all things.

And these four proved all particularities of surprising the court, and the manner of putting the same in execution, and the distributing and naming of the principal persons and actors to their several charges; and the calling of my lord's pretended enemies to trial for their lives, and the summoning of a parliament, and the altering of the government. And Sir Christopher Blunt, and Sir John Davis from Sir Christopher Blunt, did speak to the point of bringing in a toleration of the Catholic religion.

For the overt rebellion in the city itself, it was likewise opened, according to the former narration, and divided itself naturally into three parts.

First, the imprisonment of the counsellors, bringing her majesty's royal commandment to them, upon their allegiance to disperse their forces. Secondly, the entering the city, and the stirring of the people to rise, as well by provoking them to arm, as by giving forth the slanders that the realm was sold to the Spaniard, and the assailing of the queen's forces at Ludgate. And, thirdly, the resistance and keeping of the house against her majesty's forces under the charge and conduct of the lord lieutenant.

And albeit these parts were matters notorious, and within almost every man's view and knowledge; yet, for the better satisfaction of the peers, they were fully proved by the oath of the Lord Chief Justice of England, being there present, "viva voce," and the declaration of the Earl of Worcester, being one of the peers likewise, "viva voce," touching so much as passed about the imprisonment of themselves and the rest; and by the confessions of the Earl of Rutland, the Lord Sandys, the Lord Cromwell, and others.

The defence of the late Earl of Essex, touching the plot and consultation at Drury House, was: That it was not proved that he was at it; and that they could show nothing, proving his consent or privity, under his hand.

Touching the action in the city, he justified the

pretext of the danger of his life to be a truth. He said that his speech, that the realm should have been sold to the Infanta of Spain, was grounded upon a report he had heard, that Sir Robert Cecil should say privately, That the Infanta's title to the crown, after her majesty, was as good as any other. He excused the imprisonment of the counsellors to have been against his mind, forced upon him by his unruly company. He protested he never intended in his heart any hurt to her majesty's person; that he did desire to secure his access to her, for which purpose he thought to pray the help of the city, and that he did not arm his men in warlike sort, nor struck up drum, nor the like.

The defence of the late Earl of Southampton to his part in the plot and consultation at Drury House, was: That it was a matter debated, but not resolved nor concluded; and that the action which was executed, was not the action which was consulted upon. And for the open action in the city, he concurred with Essex, with protestation of the clearness of his mind for any hurt to the queen's person; and that it was but his affection to my Lord of Essex that had drawn him into the cause. This was the substance and best of both their defences. Unto which the reply was:

Defence. *To the point, that the late Earl of Essex was not at the consultation at Drury House.*

Reply. It was replied, that it was proved by all the witnesses, that that consultation was held by his special appointment and direction, and that both the list of the names and the principal articles were of his own handwriting. And whereas he said, they could not be showed extant under his hand; it was proved by the confession of my Lord of Rutland, and the Lord Sandys, that he had provided for that himself; for after he returned out of the city to his own house, he burned divers papers which he had in a cabinet, because, as himself said, they should tell no tales.

Defence. *To the point which Southampton alleged, That the consultation at Drury House, upon the list and articles in writing, was not executed:*

Reply. It was replied, that both that consultation in that manner held, if none other act had followed, was treason; and that the rebellion following in the city, was not a desisting from the other plot, but an inducement and pursuance of it; their meaning being plain on all parts, that after they had gotten the aid of the city, they would have gone and possessed the court.

Defence. *To the point, that it was a truth that Essex should have been assailed by his private enemies:*

Reply. First, He was required to deliver who it was that gave him the advertisement of it; because otherwise it must light upon himself, and be thought his own invention: whereunto he said, that he would name no man that day.

Then it was showed how improbable it was, considering that my Lord Cobham and Sir Walter Raleigh were men whose estates were better settled and established than to overthrow their fortunes by such a crime.

Besides, it was showed how the tale did not hang together, but varied in itself, as the tale of the two judges did, when one said, under the mulberry tree, and another said, under the fig tree. So sometimes it was said, that he should have been murdered in his bed, and sometimes upon the water, and sometimes it should have been performed by Jesuits some days before.

Thirdly, It was asked what reference the going into the city for succour against any his private enemies had to the imprisoning of the lord keeper, and the lord chief justice, persons that he pretended to love and respect; and the Earl of Worcester, his kinsman, and Master Comptroller, his uncle, and the publishing to the people, that the realm should have been sold to the Spaniard.

And, lastly, It was said, that these were the ancient footsteps of former traitors, to make their quarrel as against their private enemies, because God unto lawful kings did ever impart such beams of his own glory, as traitors could not look straight upon them; but ever turned their pretences against some about them; and that this action of his resembled the action of Pisistratus of Athens, that proceeded so far in this kind of fiction and dissimulation, as he lanced his own body, and came hurt and wounded before the people, as having been assailed by his private enemies; and by colour thereof obtained a guard about his person, by help of whom he after usurped upon the state.

Defence. *To the point, that he heard it reported Mr. Secretary should say, that the Infanta's title to the crown, after her majesty, was as good as any other:*

Reply. Upon this his allegation, Mr. Secretary standing out of sight in a private place, only to hear, being much moved with so false and foul an accusation, came suddenly forth, and made humble request to the lord steward, that he might have the favour to answer for himself. Which being granted him, in respect of the place he carried, after a bitter contestation on his part with the earl, and a serious protestation of his alienation of heart from the Spanish nation in any such condition, he still urged the earl to name the reporter, that all the circumstances might be known; but the earl still warily avoiding it, Mr. Secretary replied, that seeing he would allege no author, it ought to be reputed his own fiction. Whereupon the Earl of Essex said, though his own conscience was a sufficient testimony to himself, that he had not invented any untruth, yet he would affirm thus much for the world's farther satisfaction in that behalf, that the Earl of Southampton also had heard so much reported of Mr. Secretary; but said still that he for his part would name nobody. Whereupon Mr. Secretary adjured the Earl of Southampton, by all former friendship,

which had been indeed very great between them, that he would declare the person; which he did presently, and said it was Mr. Comptroller. At which speech Mr. Secretary straight took hold, and said, that he was glad to hear him named of all others; for howsoever some malicious person might peradventure have been content to give credit to so injurious a conceit of him, especially such as were against the peace wherein he was employed, and for which the Earl of Essex had ever hated him, being ever desirous to keep an army on his own dependency, yet he did think no man of any understanding would believe that he could be so senseless as to pick out the Earl of Essex, his uncle, to lay open to him his affection to that nation, in a matter of so odious and pernicious consequence; and so did very humbly crave it at the hands of the lord steward, and all the peers, that Mr. Comptroller might be sent for, to make good his accusation.

Thereupon the lord steward sent a serjeant at arms for Mr. Comptroller, who presently came thither, and did freely and sincerely deliver, that he had only said, though he knew not well to whom, that Mr. Secretary and he, walking in the garden at court one morning about two years since, and talking casually of foreign things, Mr. Secretary told him, that one Doleman had maintained in a book, not long since printed, that the Infanta of Spain had a good title to the crown of England: which was all, as Mr. Comptroller said, that ever he heard Mr. Secretary speak of that matter. And so the weak foundation of that scandal being quickly discerned, that matter ended; all that could be proved being no other, than that Mr. Comptroller had told another, who had told the Earl of Essex, that Mr. Secretary said to him that such a book said so; which every man could say that hath read it, and no man better knew than the earl himself, to whom it was dedicated.

Defence. *To the point of both their protestations, that they intended no hurt to her majesty's person.*

Reply. First, the judges delivered their opinions for matter in law upon two points: the one, that in case where a subject attempteth to put himself into such strength as the king shall not be able to resist him, and to force and compel the king to govern otherwise than according to his own royal authority and direction, it is manifest rebellion. The other, that in every rebellion the law intendeth as a consequent, the compassing the death and deprivation of the king, as foreseeing that the rebel will never suffer that king to live or reign, which might punish or take revenge of his treason and rebellion. And it was enforced by the queen's counsel, that this is not only the wisdom of the laws of the realm which so defineth of it, but it is also the censure of foreign laws, the conclusion of common reason, which is the ground of all laws, and the demonstrative assertion of experience, which is the warranty of all reason. For, first, the civil law maketh this judgment, that treason is nothing else but "crimen læsæ majestatis," or "diminutæ majestatis," making every offence which abridgeth or hurteth the power and authority of the prince, as an insult or invading of the crown, and extorting the imperial sceptre. And for common reason, it is not possible that a subject should once come to that height as to give law to his sovereign, but what with insolency of the change, and what with terror of his own guiltiness, he will never permit the king, if he can choose, to recover authority; nor, for doubt of that, to continue alive. And, lastly, for experience, it is confirmed by all stories and examples, that the subject never obtained a superiority and command over the king, but there followed soon after the deposing and putting of the king to death, as appeareth in our own chronicles, in two notable particulars of two unfortunate kings: the one of Edward the Second, who, when he kept himself close for danger, was summoned by proclamation to come and take upon him the government of the realm: but as soon as he presented himself was made prisoner, and soon after forced to resign, and in the end tragically murdered in Berkley Castle. And the other of King Richard the Second, who, though the Duke of Hereford, after King Henry the Fourth, presented himself before him with three humble reverences, yet in the end was deposed and put to death.

Defence. *To the point of not arming his men otherwise than with pistols, rapiers, and daggers, it was replied:*

Reply. That that course was held upon cunning, the better to insinuate himself into the favour of the city, as coming like a friend with an All hail, or kiss, and not as an enemy, making full reckoning that the city would arm him, and arm with him; and that he took the pattern of his action from the day of the barricadoes at Paris, where the Duke of Guise entering the city but with eight gentlemen, prevailing with the city of Paris to take his part, as my Lord of Essex, thanks be to God, failed of the city of London, made the king, whom he thought likewise to have surprised, to forsake the town, and withdraw himself into other places, for his farther safety. And it was also urged against him, out of the confession of the Earl of Rutland and others, that he cried out to the citizens, "That they did him hurt and no good, to come without weapons;" and provoked them to arm: and finding they would not be moved to arm with him, sought to arm his own troops.

This, point by point, was the effect of the reply. Upon all which evidence both the earls were found guilty of treason by all the several voices of every one of the peers, and so received judgment.

The names of the peers that passed upon the trial of the two earls.

Earl of Oxford.	Lord Cobham.
Earl of Shrewsbury.	Lord Stafford.
Earl of Derby.	Lord Gray.
Earl of Cumberland.	Lord Lumley.
Earl of Worcester.	Lord Windsor.
Earl of Sussex.	Lord Rich.
Earl of Hertford.	Lord Darcy de Chichey.
Earl of Lincoln.	Lord Chandos.
Earl of Nottingham.	Lord Hunsdon.
Lord Viscount Bindon.	Lord St. John de Bletso.
	Lord Compton.
Lord De la Ware.	Lord Burghley.
Lord Morley.	Lord Howard of Walden.

The names of the judges that assisted the court.

Lord Chief Justice.	Justice Fenner.
Lord Chief Justice of the Common Pleas.	Justice Walmsly.
	Baron Clerke.
Lord Chief Baron.	Justice Kingsmill.
Justice Gawdy.	

Some particulars of that which passed after the arraignment of the late earls, and at the time of the suffering of the Earl of Essex.

But the Earl of Essex, finding that the consultation at Drury House, and the secret plots of his premeditated and prepensed treasons were come to light, contrary to his expectation, was touched, even at his parting from the bar, with a kind of remorse; especially because he had carried the manner of his answer, rather in a spirit of ostentation and glory, than with humility and penitence: and brake out in the hall, while the lords were in conference, into these words; "That seeing things were thus carried, he would, ere it be long, say more than yet was known." Which good motion of his mind being, after his coming back to the Tower, first cherished by M. D. of Norwich, but after wrought on by the religious and effectual persuasions and exhortations of Mr. Abdy Ashton, his chaplain, the man whom he made suit by name to have with him for his soul's health, as one that of late time he had been most used unto, and found most comfort of, comparing it, when he made the request, to the case of a patient, that in his extremity would be desirous to have that physician that was best acquainted with his body; he sent word the next day, to desire to speak with some of the principal counsellors, with whom he desired also that particularly Mr. Secretary might come for one. Upon which his request, first the lord admiral and Mr. Secretary, and afterwards at two several times the lord keeper of the great seal, the lord high treasurer, the lord high admiral, and Mr. Secretary repaired unto him: before whom, after he had asked the lord keeper forgiveness, for restraining him in his house, and Mr. Secretary for having wronged him at the bar, concerning the matter of the Infanta, with signification of his earnest desire to be reconciled to them, which was accepted with all Christian charity and humanity; he proceeded to accuse heavily most of his confederates for carrying malicious minds to the state, and vehemently charged Cuffe his man to his own face, to have been a principal instigator of him in his treasons; and then disclosed how far Sir Henry Neville, her majesty's late ambassador, was privy to all the conspiracy; of whose name till then there had not been so much as any suspicion. And, farther, at the lords' first coming to him, not sticking to confess that he knew her majesty could not be safe while he lived, did very earnestly desire this favour of the queen, that he might die as privately as might be.

And the morning before his execution, there being sent unto him, for his better preparation, Mr. Doctor Mountford, and Mr. Doctor Barlow, to join with Mr. Abdy Ashton, his chaplain, he did in many words thank God that he had given him a deeper insight into his offence, being sorry he had so stood upon his justification at his arraignment: since which time, he said, he was become a new man, and heartily thanked God also that his course was by God's providence prevented. For, if his project had taken effect, "God knoweth," said he, "what harm it had wrought in the realm."

He did also humbly thank her majesty, that he should die in so private a manner, for he suffered in the Tower yard, and not upon the hill, by his own special suit, lest the acclamation of the people, for those were his own words, might be a temptation to him: adding, that all popularity and trust in man was vain, the experience whereof himself had felt: and acknowledged farther unto them, that he was justly and worthily spewed out, for that was also his own word, of the realm, and that the nature of his offence was like a leprosy that had infected far and near. And so likewise at the public place of his suffering, he did use vehement detestation of his offence, desiring God to forgive him his great, his bloody, his crying, and his infectious sin: and so died very penitently, but yet with great conflict, as it should seem, for his sins. For he never mentioned, nor remembered there, wife, children, or friend, nor took particular leave of any that were present, but wholly abstracted and sequestered himself to the state of his conscience, and prayer.

The effect of that which passed at the arraignments of Sir Christopher Blunt, *Sir* Charles Davers, *Sir* John Davis, *Sir* Gilly Meyrick, *and* Henry Cuffe.

The fifth of March, by a very honourable commission of Oyer and Terminer, directed to the Lord High Admiral, the Lord Chamberlain, Mr.

Secretary, the Lord Chief Justice of England, Mr. Chancellor of the Exchequer, Mr. Secretary Herbert, with divers of the judges, the commissioners sitting in the court of the Queen's Bench, there were arraigned and tried by a jury both of aldermen of London, and other gentlemen of good credit and sort, Sir Christopher Blunt, Sir Charles Davers, Sir John Davis, Sir Gilly Merick, and Henry Cuffe. The three first whereof, before they pleaded, asked this question of the judges: Whether they might not confess the indictment in part, and plead not guilty to it in the other part? But being resolved by the judges, that their pleading must be general; they pleaded Not guilty, as did likewise the other two, without any such question asked. The reason of that question was, as they confessed, in respect of the clause laid in the indictment; That they intended and compassed the death and destruction of the queen's majesty: unto whose person, although they confessed at the bar, as they had done in their examinations, that their meaning was to come to her in such strength, as they should not be resisted, and to require of her divers conditions and alterations of government, such as in their confessions are expressed, nevertheless they protested, they intended no personal harm to herself. Whereupon, as at the arraignment of the two earls, so then again the judges delivered the rule of the law; that the wisdom and foresight of the laws of this land maketh this judgment: That the subject that rebelleth or riseth in forcible manner to overrule the royal will and power of the king, intendeth to deprive the king both of crown and life; and that the law judgeth not of the fact by the intent, but of the intent by the fact. And the queen's counsel did again enforce that point, setting forth that it was no mystery or quiddity of the common law, but it was a conclusion infallible of reason and experience; for that the crown was not a ceremony or garland, but consisted of pre-eminence and power.

And, therefore, when the subject will take upon him to give law to the king, and to make the power sovereign and commanding to become subject and commanded; such subject layeth hold of the crown, and taketh the sword out of the king's hands. And that the crown was fastened so close upon the king's head, that it cannot be pulled off, but that head, and life, and all will follow; as all examples, both in foreign stories and here at home, do make manifest. And, therefore, when their words did protest one thing, and their deeds did testify another, they were but like the precedent of the protestation used by Manlius, the lieutenant of Catiline, that conspired against the state of Rome, who began his letter to the senate with these words: "Deos hominesque testor, patres conscripti, nos nihil aliud, &c."

And it was said farther, that, admitting their protestations were so far true, that they had not at that time in their minds a formed and distinct cogitation to have destroyed the queen's person; yet, nothing was more variable and mutable than the mind of man, and especially "Honores mutant mores:" when they were once aloft, and had the queen in their hands, and were peers in my Lord of Essex his parliament, who could promise of what mind they would then be? especially when my Lord of Essex at his arraignment had made defence of his first action of imprisoning the privy counsellors, by pretence that he was enforced to it by his unruly company. So that if themselves should not have had, or would not seem to have had, that extreme and devilish wickedness of mind, as to lay violent hands upon the queen's sacred person; yet, what must be done to satisfy the multitude and secure their party, must be then the question: wherein the example was remembered of Richard the Third, who, though he were king in possession, and the rightful inheritors but infants, could never sleep quiet in his bed, till they were made away. Much less would a Catilinary knot and combination of rebels, that did rise without so much as the fume of a title, ever endure, that a queen that had been their sovereign, and had reigned so many years in such renown and policy, should be longer alive than made for their own turn. And much speech was used to the same end. So that in the end all those three at the bar said, that now they were informed, and that they descended into a deeper consideration of the matter, they were sorry they had not confessed the indictment. And Sir Christopher Blunt, at the time of his suffering, discharged his conscience in plain terms, and said publicly before all the people, that he saw plainly with himself, that if they could not have obtained all that they would, they must have drawn blood even from the queen herself.

The evidence given in against them three, was principally their own confessions, charging every one himself, and the other, and the rest of the evidence used at the arraignment of the late earls, and mentioned before; save that, because it was perceived, that that part of the charge would take no labour nor time, being plain matter and confessed, and because some touch had been given in the proclamation of the treasons of Ireland, and chiefly because Sir Christopher Blunt was marshal of the army in Ireland, and most inward with my lord in all his proceedings there; and not so only, but farther in the confession of Thomas Lee it was precisely contained, that he knew the Earl of Essex and Tyrone, and Blunt, the marshal, to be all one, and to run one course. It was thought fit to open some part of the treasons of Ireland, such as were then known, which very happily gave the occasion for Blunt to make that discovery of the purpose to have invaded the realm with the army of Ireland, which he then offered, and after-

wards uttered, and in the end sealed with his blood, as is hereafter set down.

Against Cuffe was given in evidence, both Sir Charles Davers's confession, who charged him, when there was any debating of the several enterprises which they should undertake, that he did ever bind firmly and resolutely for the court: and the accusation under the earl's hand, avouched by him to his face, that he was a principal instigator of him in his treasons; but especially a full declaration of Sir Henry Neville's, which describeth and planteth forth the whole manner of his practising with him.

The fellow, after he had made some introduction by an artificial and continued speech, and some time spent in sophistical arguments, descended to these two answers: the one, for his being within Essex House that day, the day of the rebellion, they might as well charge a lion within a grate with treason, as him; and for the consultation at Drury House, it was no more treason than the child in the mother's belly is a child. But it was replied, that for his being in the house, it was not compulsory, and that there was a distribution of the action, of some to make good the house, and some to enter the city, and the one part held correspondent to the other, and that in treasons there was no accessaries, but all principals.

And for the consultation at Drury House, it was a perfect treason in itself, because the compassing of the king's destruction, which by judgment of law was concluded and implied in that consultation, was treason in the very thought and cogitation, so as that thought be proved by an overt act; and that the same consultation and debating thereupon was an overt act, though it had not been upon a list of names, and articles in writing, much more being upon matter in writing.

And, again, the going into the city was a pursuance and inducement of the enterprise to possess the court, and not a desisting or a departure from it.

And, lastly, it was ruled by the judges for law, that if many do conspire to execute treason against the prince in one manner, and some of them do execute it in another manner, yet their act, though differing in the manner, is the act of all them that conspire, by reason of the general malice of the intent.

Against Sir Gilly Merick, the evidence that was given, charged him chiefly with the matter of the open rebellion, that he was a captain or commander over the house, and took upon him charge to keep it, and make it good as a place of retreat for those which issued into the city, and fortifying and barricading the same house, and making provision of muskets, powder, pellets, and other munition and weapons for the holding and defending of it, and as a busy, forward, and noted actor in that defence and resistance which was made against the queen's forces brought against it by her majesty's lieutenant.

And farther, to prove him privy to the plot, it was given in evidence, that some few days before the rebellion, with great heat and violence he had displaced certain gentlemen lodged in a house fast by Essex House, and there planted divers of my lord's followers and complices, all such as went forth with him in the action of rebellion.

That the afternoon before the rebellion, Merick, with a great company of others, that afterwards were all in the action, had procured to be played before them the play of deposing King Richard the Second.

Neither was it casual, but a play bespoken by Merick.

And not so only, but when it was told him by one of the players, that the play was old, and they should have loss in playing it, because few would come to it, there were forty shillings extraordinary given to play it, and so thereupon played it was.

So earnest he was to satisfy his eyes with the sight of that tragedy, which he thought soon after his lordship should bring from the stage to the state, but that God turned it upon their own heads.

The speeches of Sir Christopher Blunt at his execution are set down as near as they could be remembered, after the rest of the confessions and evidences.

Here follow the voluntary confessions themselves, such as were given in evidence at both the several arraignments, taken forth word for word out of the originals; whereby it may appear how God brought matters to light, at several times, and in several parts, all concurring in substance; and with them other declarations and parts of evidence.

The confession of THOMAS LEE, *taken the* 14*th of February*, 1600, *before* SIR JOHN PEYTON, *Lieutenant of the Tower;* ROGER WILBRAHAM, *Master of the Requests;* SIR ANTHONY SAINTLEGER, *Master of the Rolls in Ireland; and* THOMAS FLEMING, *her majesty's Solicitor General.*

This examinate saith, that Tyrone sent a message to this examinate by James Knowd, whom this examinate by the marshal's warrant in writing had sent to Tyrone before himself went to Tyrone, that if the Earl of Essex would follow his plot, he would make him the greatest man that ever was in England, and that, when Essex and Tyrone should have conference together, for his assurance unto the Earl of Essex, Tyrone would deliver his eldest son in pledge to the earl. And with this message this examinate made the Earl of Essex acquainted before his coming to this examinate's house, at that time when this examinate was sent to Tyrone.

This examinate saith, he knew that Essex, Ty-

rone, and the marshal, Sir Christopher Blunt, were all one, and held all one course.

THOMAS LEE.

Exam. per JOHN PEYTON,
ROGER WILBRAHAM,
ANTHONY SAINTLEGER,
THOMAS FLEMING.

The declaration of Sir WILLIAM WARREN. *3 Octobris*, 1599.

The said Sir William came to Armagh the last Friday, being the twenty-eight of September: from thence he sent a messenger in the night to Tyrone to Dungannon, signifying his coming to Armagh, as aforesaid, and that the next morning he would meet Tyrone at the fort of Blackwater: where accordingly the said Tyrone met with him; and after other speeches, by farther discourse the said Tyrone told the said Sir William, and delivered it with an oath, that within these two months he should see the greatest alteration, and the strangest, that he the said Sir William could imagine, or ever saw in his life: and said, that he hoped, before it was long, that he the said Tyrone should have a good share in England: which speeches of the alteration Tyrone reiterated two or three several times.

WILLIAM WARREN.

Certified from the council of Ireland to the lords of the council here.

The declaration of THOMAS WOOD, *20 Januarii*, 1599, *taken before the Lord* BUCKHURST, *Lord High Treasurer; the Earl of* NOTTINGHAM, *Lord High Admiral; Sir* ROBERT CECIL, *principal Secretary; and Sir* J. FORTESCUE, *Chancellor of the Exchequer.*

The said Wood said, that happening to be with the Lord Fitzmorris, Baron of Licksnaw, at his house at Licksnaw, between Michaelmas and Alhallowtide last, the said baron walking abroad with the said Wood, asked of him what force the Earl of Essex was of in England; he answered, he could not tell, but said he was well beloved of the commonalty. Then said the baron, that the earl was gone for England, and had discharged many of the companies of Ireland, and that it was agreed that he should be King of England, and Onele to be Viceroy of Ireland; and whensoever he should have occasion, and would send for them, Onele should send him eight thousand men out of Ireland. The said Wood asked the baron, how he knew that? He answered, that the Earl of Desmond had written to him so much.

THOMAS WOOD.

Confessed in the presence of
THOMAS BUCKHURST,
NOTTINGHAM,
ROBERT CECIL,
JOHN FORTESCUE.

The confession of JAMES KNOWD, *taken the 16th of February*, 1600, *before Sir* ANTHONY SAINTLEGER, *Master of the Rolls in Ireland, and* ROGER WILBRAHAM, *Master of the Requests.*

Owney Mac Rory having secret intelligence of the friendship between the Earl of Essex and Tyrone, wrote to Tyrone, desiring him to certify him thereof, whereby he might frame his course accordingly, and not do any thing contrary to their agreement: which letter myself did write by Owney's appointment, for then I was in credit with him; in which letter he also desired Tyrone to send him some munition. The letter, with instructions to that effect, was in my presence delivered to one Turlagh Mac Davy O'Kelly, a man of secrecy, sufficiency, and trust with Owney; and he carried it to Tyrone: before whose return Owney grew suspicious of me, because I sometimes belonged to Mr. Bowen, and therefore they would not trust me, so as I could not see the answer: but yet I heard by many of their secret council, that the effect thereof was, That the Earl of Essex should be King of England, and Tyrone of Ireland.

Afterwards I met with Turlagh Mac Davy, the messenger aforesaid, and asked him whether he brought an answer of the letter from Tyrone. He said he did, and delivered it to Owney. And then I asked him what he thought of the wars. He told me he had good hope the last year, and had none this year; his reason was, as he said, that the Earl of Essex was to take their part, and they should aid him towards the conquest of England; and now they were hindered thereof by means of his apprehension.

I, dwelling with the tanist of the country, my mother's cousin german, heard him speak sundry times, that now the Earl of Essex had gotten one of the swords, he would never forsgo his government until he became King of England, which was near at hand.

I saw a letter which the Earl of Essex writ to Owney, to this effect; That if Owney came to him, he would speak with him about that, which if he would follow, should be happy for him and his country.

JAMES KNOWD.

Exam. per ANTHONY SAINTLEGER,
ROGER WILBRAHAM.

The declaration of DAVID HETHRINGTON, *an ancient captain and serviter in Ireland, 6 January*, 1599, *taken before the Lord* BUCKHURST, *Lord High Treasurer; the Earl of* NOTTINGHAM, *Lord High Admiral; Sir* ROBERT CECIL, *principal Secretary; and Sir* JOHN FORTESCUE, *Chancellor of the Exchequer.*

He, the said David Hethrington, riding into the edge of the county of Kildare, about the end of the first cessation, fortuned to meet with one James Occurren, one of the horsemen of Master

Bowen, provost marshal of Lemster, who told him, that the said James Occurren meeting lately with a principal follower of Owney Mac Rory, chief of the Moores, Owney's man asked him what news he heard of the Earl of Essex? To which James Occurren answered, that he was gone for England: whereunto he said, Nay, if you can tell me no news, I can tell you some; the Earl of Essex is now in trouble for us, for that he would do no service upon us; which he never meant to do, for he is ours, and we are his.

DAVID HETHRINGTON.

Confessed in the presence of
THO. BUCKHURST,
NOTTINGHAM,
RO. CECIL,
JO. FORTESCUE.

The first confession of Sir FERDINANDO GORGE, *knight, the* 16*th of February*, 1600, *taken before Sir* THOMAS EGERTON, *Lord Keeper of the Great Seal; the Lord* BUCKHURST, *Lord High Treasurer; the Earl of* NOTTINGHAM, *Lord High Admiral; and Sir* ROBERT CECIL, *principal Secretary.*

He saith, the Earl of Essex wrote a letter to him in January, complaining of his misfortune: that he desired his company, and desired his repair up to him by the second of February; that he came to town on Saturday seven-night before the earl's insurrection, and that the same night late he visited the earl: who, after compliments, told him that he stood on his guard, and resolved not to hazard any more commandments or restraints; that he desired him to rest him that night, and to repair unto him again, but in such sort as it might not be noted.

That he had been with the earl two or three times that week; and on Saturday, being the seventh of February, the earl told him that he had been sent for by the lords, and refused to come; delivering farther, that he resolved to defend himself from any more restraint.

He farther saith, that it was in question the same Saturday night, to have stirred in the night, and to have attempted the court. But being demanded, whether the earl could have had sufficient company to have done any thing in the night: he answered, that all the earl's company were ready at one hour's warning, and had been so before, in respect that he had meant long before to stand upon his guard.

That it was resolved to have the court first attempted; that the earl had three hundred gentlemen to do it; but that he, the said Ferdinando Gorge, was a violent dissuader of him from that purpose, and the earl most confident in the party of London, which he meant, upon a later dispute, first to assure; and that he was also assured of a party in Wales, but meant not to use them, until he had been possessed of the court.

That the earl and Sir Christopher Blunt understanding that Sir Walter Raleigh had sent to speak with him in the morning, the said Sir Christopher Blunt persuaded him, either to surprise Sir Walter Raleigh, or to kill him. Which when he utterly refused, Sir Christopher Blunt sent four shot after him in a boat.

That at the going out of Essex House gate, many cried out, To the court, to the court. But my Lord of Essex turned him about towards London.

That he meant, after possession of the court, to call a parliament, and therein to proceed as cause should require.

At that time of the consultation on Saturday night, my lord was demanded, what assurance he had of those he made account to be his friends in the city? Whereunto he replied, that there was no question to be made of that, for one, amongst the rest, that was presently in one of the greatest commands amongst them, held himself to be interested in the cause, for so he phrased it, and was colonel of a thousand men, which were ready at all times; besides others that he held himself as assured of, as of him, and able to make as great numbers. Some of them had at that instant, as he reported to us, sent unto him, taking notice of as much as he made us to know of the purpose intended to have entrapped him, and made request to know his pleasure.

FERD. GORGE.

Exam. per THO. EGERTON, C. S.
THOS. BUCKHURST,
NOTTINGHAM,
RO. CECIL.

The second confession of Sir FERDINANDO GORGE, *the* 18*th of February*, 1600, *all written of his own hand; and acknowledged in the presence of Sir* THOMAS EGERTON, *Lord Keeper of the Great Seal; the Lord* BUCKHURST, *Lord High Treasurer; the Earl of* NOTTINGHAM, *Lord High Admiral; and Sir* ROBERT CECIL, *principal Secretary.*

On Tuesday before the insurrection, as I remember, I was sent unto by my Lord of Essex, praying me to meet my Lord of Southampton, Sir Charles Davers, Sir John Davis, and other his friends at Drury House; where I should see a schedule of his friends' names, and projects to be disputed upon. Whither I came accordingly, and found the foresaid earl, Sir Charles Davers, Sir John Davis, and one Mr. Littleton. The names were showed and numbered to be six score; earls, barons, knights, and gentlemen. The projects were these, whether to attempt the court, or the Tower, or to stir his friends in London first, or whether both the court and Tower at an instant? I disliked that counsel. My reasons were, that I alleged to them. first to attempt both

with those numbers, was not to be thought on, because that was not sufficient; and therefore advised them to think of something else. Then they would needs resolve to attempt the court, and withal desired mine opinion. But I prayed them first to set down the manner how it might be done. Then Sir John Davis took ink and paper, and assigned to divers principal men their several places; some to keep the gate, some to be in the hall, some to be in the presence, some in the lobby, some in the guard-chamber, others to come in with my lord himself, who should have had the passage given him to the privy-chamber, where he was to have presented himself to her majesty.

FERD. GORGE.

Knowledged in the presence of
THO. EGERTON, C. S.
THO. BUCKHURST,
NOTTINGHAM,
RO. CECIL.

The confession of Sir JOHN DAVIS, *taken the* 18*th of February*, 1600, *before the Earl of* NOTTINGHAM, *Lord High Admiral; Sir* ROBERT CECIL, *principal Secretary; and* JOHN HERBERT, *second Secretary of State.*

Sir John Davis being demanded, how long before my Lord Essex's tumult he knew of such his purpose?

He answers, that he knew not directly of any meaning my lord had, until the Sunday sevennight before, or thereabout.

Being demanded, what he knew? Then he answered, that my lord consulted to possess himself of the court, at such convenient time when he might find least opposition. For executing of which enterprises, and of other affairs, he appointed my Lord of Southampton, Sir Charles Davers, Sir Ferdinando Gorge, and himself, to meet at Drury House, and there to consider of the same, and such other projects as his lordship delivered them: and, principally, for surprising of the court, and for the taking of the Tower of London. About which business they had two meetings, which were five or six days before the insurrection.

He farther saith, that Sir Christopher Blunt was not at this consultation, but that he stayed and advised with my lord himself about other things to him unknown: for that my lord trusted several men in several businesses, and not all together

Being demanded, what was resolved in the opinions of these four before named? He saith, that Sir Charles Davers was appointed to the presence-chamber, and himself to the hall: and that my lord was to determine himself, who should have guarded the court-gate and the water-gate. And that Sir Charles Davers, upon a signal or a watchword, should have come out of the presence into the guard-chamber; and then come out of the hall to have met him, and so have stepped between the guard and their halberds; of which guard they hoped to have found but a dozen, or some such small number.

Being asked, whether he heard that such as my lord misliked should have received any violence? He saith, that my lord avowed the contrary, and that my lord said, he would call them to an honourable trial, and not use the sword.

Being demanded, whether my lord thought his enemies to be Spanish, "bona fide," or no? He saith, that he never heard any such speech; and if my lord used any such, it came into his head on the sudden.

Being demanded, what party my lord had in London? He saith, that the sheriff Smith was his hope, as he thinketh.

Being demanded, whether my lord promised liberty of Catholic religion? He saith, that Sir Christopher Blunt did give hope of it.

JOHN DAVIS.

Exam. per NOTTINGHAM,
RO. CECIL,
J. HERBERT.

The first confession of Sir CHARLES DAVERS, *taken the* 18*th of February, anno* 1600, *before Sir* THOMAS EGERTON, *Lord Keeper of the Great Seal; the Lord* BUCKHURST, *Lord High Treasurer; the Earl of* NOTTINGHAM, *the Lord High Admiral; Lord* HUNSDON, *Lord Chamberlain; and Sir* ROBERT CECIL, *principal Secretary.*

He confesseth, that before Christmas the Earl of Essex had bethought himself, how he might secure his access unto the queen in such sort as he might not be resisted; but no resolution determinately taken, until the coming up of this examinate a little after Christmas.

And then he doth confess, that the resolution was taken to possess himself of the court; which resolution was taken agreeable to certain articles, which the Earl of Essex did send to the Earl of Southampton, this examinate, Sir Ferdinando Gorge, and Sir John Davis, written with the earl's own hand. To which consultation, being held at Drury House, some four or five days before Sunday, that was the eighth of February, Littleton came in towards the end.

The points which the Earl of Essex projected under his hand were these:

First, whether it were fit to take the Tower of London. The reason whereof was this: that after the court was possessed, it was necessary to give reputation to the action, by having such a place to bridle the city, if there should be any mislike of their possessing the court.

To the possessing of the court, these circumstances were considered:

First, the Earl of Essex should have assembled

all the noblemen and gentlemen of quality on his party; out of which number he should have chosen so many as should have possessed all the places of the court, where there might have been any likelihood of resistance: which being done, the Earl of Essex, with divers noblemen, should have presented himself to the queen.

The manner how it should have been executed, was in this sort: Sir Christopher Blunt should have had charge of the outer gate, as he thinketh. Sir Charles Davers, this examinate, with his company, should have made good the presence, and should have seized upon the halberds of the guard. Sir John Davis should have taken charge of the hall. All this being set, upon a signal given, the earl should have come into the court with his company.

Being asked, what they would have done after? he saith, They would have sent to have satisfied the city, and have called a parliament.

These were the resolutions set down by the Earl of Essex of his own hand, after divers consultations.

He saith, Cuffe was ever of opinion, that the Earl of Essex should come in this sort to the court. CHARLES DAVERS.

Exam. per THO. EGERTON, C. S.
THO. BUCKHURST,
NOTTINGHAM,
G. HUNSDON,
RO. CECIL.

The second confession of Sir CHARLES DAVERS, *taken the same day, and set down upon farther calling himself to remembrance, under his own hand, before Sir* THO. EGERTON, *Lord Keeper of the Great Seal; Lord* BUCKHURST, *Lord High Treasurer; the Earl of* NOTTINGHAM, *Lord High Admiral; Sir* ROBERT CECIL, *principal Secretary.*

Some points of the articles which my Lord of Essex sent unto Drury House, as near as I can remember, were these; whether both the court and the Tower should be both attempted at one time? if both, what numbers should be thought requisite for either? if the court alone, what places should be first possessed? by what persons?

And for those which were not to come into the court beforehand, where and in what sort they might assemble themselves, with least suspicion, to come in with my lord?

Whether it were not fit for my lord, and some of the principal persons, to be armed with privy coats? CHARLES DAVERS.

Knowledged in the presence of
THO. EGERTON, C. S. THO. BUCKHURST,
NOTTINGHAM, ROBERT CECIL.

The first confession of Sir CHRISTOPHER BLUNT, *examined the* 18*th of February*, 1600, *before* JO. HERBERT, *second Secretary of Estate, and in the presence of* NIC. KEMPE, *counsellor at law,* WILLIAM WAIMARKE, WILLIAM MARTIN, ROBERT ANDREWS, *citizens,* JOHN TREVOR, *surveyor of the navy, and* THOMAS THORNEY, *his surgeon.*

He confesseth that the Earl of Essex sent Wiseman, about the 20th of January, to visit his wife, with letters of compliment, and to require him to come up unto him to London, to settle his estate according as he had written unto him before some few days.

Being demanded, to what end they went to the city, to join with such strength as they hoped for there? he confesseth it was to secure the Earl of Essex his life, against such forces as should be sent against him. And being asked, What, against the queen's forces? he answered, That must have been judged afterwards.

But being farther asked, Whether he did advise to come unto the court over night? He saith, No; for Sir Ferdinando Gorge did assure, that the alarm was taken of it at the court, and the guards doubled.

Being asked, whether he thought any prince could have endured to have any subject make the city his mediator? or gather force to speak for him? He saith, he is not read in stories of former times; but he doth not know but that in former times subjects have used force for their mediation.

Being asked, what should have been done by any of the persons that should have been removed from the queen? He answered, that he never found my lord disposed to shed blood; but that any that should have been found, should have had indifferent trial.

Being asked upon his conscience, whether the Earl of Essex did not give him comfort, that if he came to authority, there should be a toleration for religion? He confesseth, he should have been to blame to have denied it.

CHRISTOPHER BLUNT.

This was read unto Sir Christopher Blunt, and afterwards signed by him in the presence of us who are under written:

JO. HERBERT, ROB. ANDREWS
NIC. KEMPE, JO. TREVOR,
WIL. WAIMARKE, TH. THORNEY.
WIL. MARTIN,

The second confession of Sir CHRISTOPHER BLUNT, *the same day, viz.: the* 18*th of February; taken before Mr.* JOHN HERBERT, *second Secretary of Estate, and subscribed by him in the presence of* NICHOLAS KEMPE, *counsellor at law,* THOMAS THORNEY, *his surgeon, and* WILLIAM MARTIN, ROBERT ANDREWS, *and* RANDOLPH BULL, *citizens.*

Sir Christopher Blunt, after the signing of this confession, being told, that he did not deal plainly, excused himself by his former weakness,

putting us in mind that he said once before, that when he was able to speak, he would tell all truth, doth now confess; That four or five days before the Earl of Essex did rise, he did set down certain articles to be considered on, which he saw not, until afterwards he was made acquainted with them, when they had among themselves disputed: which were these.

One of them was, whether the Tower of London should be taken?

Another, whether they should not possess the court, and so secure my lord, and other men, to come to the queen?

For the first concerning the Tower, he did not like it; concluding, that he that had the power of the queen, should have that.

He confesseth that upon Saturday night, when Mr. Secretary Herbert had been with the earl, and that he saw some suspicion was taken, he thought it in vain to attempt the court, and persuaded him rather to save himself by flight, than to engage himself farther, and all his company. And so the resolution of the earl grew to go into the city, in hope, as he said before, to find many friends there.

He doth also say, that the earl did usually speak of his purpose to alter the government.

CHRISTOPHER BLUNT.

Exam. per Jo. HERBERT.

Subscribed in the presence of

NIC. KEMPE, W. MARTIN,
THO. THORNEY, RANDOLPH BULL.
ROB. ANDREWS.

The declaration of the Lord Keeper, the Earl of WORCESTER, *and the Lord Chief Justice of England.*

Upon Sunday, being the 8th of February last past, about ten of the clock in the forenoon, the Lord Keeper of the Great Seal, the Earl of Worcester, Sir William Knolles, comptroller of her majesty's household, and the Lord Chief Justice of England being commanded by direction from the queen's majesty, did repair to the late Earl of Essex his house, and finding the gate shut against them, after a little stay they were let in at the wicket: and as soon as they were within the gate, the wicket was shut upon them, and all their servants kept out.

At their coming thither they found the court full of men assembled together in very tumultuous sort; the Earls of Essex, Rutland, and Southampton, and the Lord Sandys, Mr. Parker, commonly called Lord Montegle, Sir Christopher Blunt, Sir Charles Davers, and many other knights and gentlemen, and other persons unknown, which flocked together about the lord keeper, &c. And thereupon the lord keeper told the Earl of Essex, that they were sent from her majesty to understand the cause of this their assembly, and to let them know, that if they had any particular cause of grief against any person whatsoever, it should be heard, and they should have justice.

Hereupon the Earl of Essex with a very loud voice declared, That his life was sought, and that he should have been murdered in his bed; that he had been perfidiously dealt with; that his hand has been counterfeited, and letters written in his name; and that, therefore, they were assembled there together to defend their lives; with much other speech to like effect. Hereupon the lord chief justice said unto the earl, That if they had any such matter of grief, or if any such matter were attempted or purposed against him, he willed the earl to declare it, assuring him that it should be truly related to her majesty, and that it should be indifferently heard, and justice should be done whomsoever it concerned.

To this the Earl of Southampton objected the assault made upon him by the Lord Gray. Whereunto the lord chief justice said, That in his case justice had been done, and the party imprisoned for it. And hereupon the lord keeper did eftsoons will the Earl of Essex, that whatsoever private matter or offence he had against any person whatsoever, if he would deliver it unto them, they would faithfully and honestly deliver it to the queen's majesty, and doubted not to procure him honourable and equal justice, whomsoever it concerned; requiring him, that if he would not declare it openly, that he would impart it unto them privately, and doubted not but they would satisfy him in it.

Upon this there was a great clamour raised amongst the multitude, crying, "Away, my lord, they abuse you, they betray you, they undo you, you lose time." Whereupon the lord keeper put on his hat, and said with a loud voice, "My lord, let us speak with you privately, and understand your griefs; and I command you all upon your allegiance, to lay down your weapons, and to depart, which you ought all to do, being thus commanded, if you be good subjects, and owe that duty to the queen's majesty which you profess." Whereupon they all brake out into an exceeding loud shout and cry, crying, "All! all! all!"

And whilst the lord keeper was speaking, and commanding them upon their allegiance, as is before declared, the Earl of Essex, and the most part of that company did put on their hats, and so the Earl of Essex went into the house, and the lord keeper, &c., followed him, thinking that his purpose had been to speak with them privately, as they had required. And, as they were going, some of that disordered company cried, "Kill them." And as they were going into the great chamber, some cried, "Cast the great seal out at the window." Some other cried there, "Kill them;" and some other said, "Nay, let us shop them up."

The lord keeper did often call to the Earl of Essex to speak with them privately, thinking still that his meaning had been so, until the earl brought them into his back chamber, and there gave order to have the farther door of that chamber shut fast. And at his going forth out of that chamber, the lord keeper pressing again to have spoken with the Earl of Essex, the earl said, "My lords, be patient a while, and stay here, and I will go into London, and take order with the mayor and sheriffs for the city, and will be here again within this half-hour;" and so departed from the lord keeper, &c., leaving the lord keeper, &c., and divers of the gentlemen pensioners in that chamber, guarded by Sir John Davis, Francis Tresham, and Owen Salisbury, with musket shot, where they continued until Sir Ferdinando Gorge came and delivered them about four of the clock in the afternoon.

In the mean time, we did often require Sir John Davis, and Francis Tresham, to suffer us to depart, or at the least to suffer some one of us to go to the queen's majesty, to inform her where and in what sort we were kept. But they answered, That my lord, meaning the Earl of Essex, had commanded that we should not depart before his return, which, they said, would be very shortly.

THOMAS EGERTON, C. S.
EDWARD WORCESTER, JOHN POPHAM.

The examination of ROGER, *Earl of* RUTLAND, *the 12th of February*, 1600, *taken before Sir* THOMAS EGERTON, *Lord Keeper of the Great seal; the Lord* BUCKHURST, *Lord High Treasurer; the Earl of* NOTTINGHAM, *Lord High Admiral; Sir* ROBERT CECIL, *principal Secretary; and Sir* JO. POPHAM, *Lord Chief Justice of England.*

He saith, that at his coming to Essex House on Sunday morning last, he found there with the Earl of Essex, the Lord Sandys, and the Lord Chandos, and divers knights and gentlemen. And the Earl of Essex told this examinate, that his life was practised to be taken away by the Lord Cobham, and Sir Walter Raleigh, when he was sent for to the council; and the earl said, that now he meant by the help of his friends to defend himself: and saith, that the detaining of the lord keeper and the other lords sent to the earl from the queen, was a stratagem of war; and saith, That the Earl of Essex told him that London stood for him, and that sheriff Smith had given him intelligence, that he would make as many men to assist him as he could; and farther the Earl of Essex said, that he meant to possess himself of the city, the better to enable himself to revenge him on his enemies, the Lord Cobham, Sir Robert Cecil, and Sir Walter Raleigh. And this examinate confesseth, That he resolved to live and die with the Earl of Essex; and that the Earl of Essex did intend to make his forces so strong, that her majesty should not be able to resist him in the revenge of his enemies. And saith, That the Earl of Essex was most inward with the Earl of Southampton, Sir Christopher Blunt, and others; who have of long time showed themselves discontented, and have advised the Earl of Essex to take other courses, and to stand upon his guard: and saith, That when the Earl of Essex was talking with the lord keeper, and other the lords sent from her majesty, divers said, "My lord, they mean to abuse you, and you lose time." And when the earl came to sheriff Smith's, he desired him to send for the lord mayor that he might speak with him; and as the earl went in the streets of London, this examinate said to divers of the citizens, that if they would needs come, that it was better for their safety to come with weapons in their hands: and saith, That the Earl of Essex, at the end of the street where sheriff Smith dwelt, cried out to the citizens, that they did him harm, for that they came naked; and willed them to get them weapons; and the Earl of Essex also cried out to the citizens, that the crown of England was offered to be sold to the Infanta: and saith, That the earl burned divers papers that were in a little casket, whereof one was, as the earl said, a history of his troubles: and saith, That when they were assaulted in Essex House, after their return, they first resolved to have made a sally out; and the earl said, that he was determined to die; and yet in the end they changed their opinion, and yielded: and saith, That the Earl of Southampton, Sir Christopher Blunt, and Sir John Davis, advised the Earl of Essex, that the lord keeper and his company should be detained: and this examinate saith, That he heard divers there present cry out, "Kill them, kill them:" and saith, That he thinketh the Earl of Essex intended, that after he had possessed himself of the city, he would entreat the lord keeper and his company to accompany him to the court. He saith, he heard Sir Christopher Blunt say openly, in the presence of the Earl of Essex and others, how fearful, and in what several humours they should find them at the court, when they came thither.

RUTLAND.

Exam. per TH. EGERTON, C. S. RO. CECIL,
T. BUCKHURST, JO. POPHAM.
NOTTINGHAM,

The confession of WILLIAM, *Lord* SANDYS, *of the parish of Sherborne-Cowdry, in the county of Southampton, taken this 16th of February*, 1600, *before Sir* JOHN POPHAM, *Lord Chief Justice; Roger* WILBRAHAM, *Master of the Requests; and* EDWARD COKE, *her majesty's Attorney General.*

He saith, That he never understood that the earl did mean to stand upon his strength till Sun-

day in the morning, being the 8th of this instant February: and saith, that in the morning of that day this examinate was sent for by the Earl of Essex about six or seven of the clock: and the earl sent for him by his servant Warburton, who was married to a widow in Hampshire. And at his coming to the earl, there were six or seven gentlemen with him, but remembereth not what they were; and next after, of a nobleman, came my Lord Chandos, and after him came the Earl of Southampton, and presently after the Earl of Rutland, and after him Mr. Parker, commonly called the Lord Montegle: and saith, That at his coming to the Earl of Essex, he complained that it was practised by Sir Walter Raleigh to have murdered him as he should have gone to the lord treasurer's house with Mr. Secretary Herbert. And saith, that he was present in the court-yard of Essex House, when the lord keeper, the Earl of Worcester, Sir William Knolles, and the lord chief justice, came from the queen's majesty to the Earl of Essex; and the lord chief justice required the Earl of Essex to have some private conference with him; and that if any private wronga were offered unto him, that they would make true report thereof to her majesty, who, no doubt, would reform the same: and saith, That this examinate went with the earl, and the rest of his company, to London, to Sheriff Smith's, but went not into the house with him, but stayed in the street a while; and being sent for by the Earl of Essex, went into the house, and from thence came with him till he came to Ludgate; which place being guarded, and resistance being made, and perceived by the Earl of Essex, he said unto his company, "Charge;" and thereupon Sir Christopher Blunt, and others of his company gave the charge, and being repulsed, and this examinate hurt in the leg, the earl retired with this examinate and others to his house called Essex House. And on his retire, the earl said to this examinate, That if sheriff Smith did not his part, that his part was as far forth as the earl's own; which moved him to think that he trusted to the city. And when the earl was, after his retire, in Essex House, he took an iron casket, and broke it open, and burned divers papers in it, whereof there was a book, as he taketh it, and said, as he was burning of them, that they should tell no tales to hurt his friends: and saith, That the earl said, that he had a black bag about his neck that should tell no tales. WILLIAM SANDYS.

Exam. per Jo. POPHAM,
ROGER WILBRAHAM,
EDW. COKE.

The examination of the Lord CROMWELL, *taken the 7th of March*, 1600, *by Sir* J. POPHAM, *Lord Chief Justice;* CHRIST. YELVERTON, *her majesty's serjeant; and* FR. BACON, *of her majesty's learned counsel.*

* At the sheriff's house this examinate pressed in with the rest, and found the earls shifting themselves in an inner chamber, where he heard my Lord of Essex certify the company, that he had been advertised out of Ireland, which he would not now hide from them, that the realm should be delivered over to the hands of the Infanta of Spain, and that he was wished to look to it; farther, that he was to seek redress for injuries; and that he had left at his house for pledges, the lord keeper, the Earl of Worcester, Sir William Knolles, and the lord chief justice.

EDW. CROMWELL.

Exam. per Jo. POPHAM, CHR. YELVERTON,
FR. BACON.

Sir CHRISTOPHER BLUNT, *knight, at the time of his arraignment, did openly at the bar desire to speak with the lord admiral and Mr. Secretary, before whom he made this confession following; which the Earl of* SOUTHAMPTON *confirmed afterwards, and he himself likewise at his death.*

He confesseth, that at the castle of Dublin, in that lodging which was once the Earl of Southampton's, the Earl of Essex purposing his return into England, advised with the Earl of Southampton and himself, of his best manner of going into England for his security, seeing to go he was resolved.

At that time he propounded his going with a competent number of soldiers, to the number of two or three thousand, to have made good his first landing with that force, until he could have drawn unto himself a sufficient strength to have proceeded farther.

From this purpose this examinate did use all forcible persuasions, alleging not only his own ruin, which should follow thereof, and all those which should adhere to him in that action; but urging it to him as a matter most foul, because he was not only held a patron of his country, which by this means he should have destroyed; but also should have laid upon himself an irrevocable blot, having been so deeply bound to her majesty. To which dissuasion the Earl of Southampton also inclined.

This design being thus dissuaded by them, then they fell to a second consideration: and therein this examinate confesseth, That he rather advised him, if needs he would go, to take with him some competent number of choice men.

He did not name unto him any particular power that would have come to him at his landing, but

* This examination, as appeareth by the date, was taken after Essex's arraignment, but is inserted, to show how the speech, of the realm to be sold to the Infanta, which at his arraignment he derived from Mr. Secretary, at sheriff Smith's house he said he was advertised out of Ireland: and with this latter concur many other examinations.

assured himself that his army would have been quickly increased by all sorts of discontented people.

He did confess before his going, That he was assured that many of the rebels would be advised by him, but named none in particular.

The examination of the Earl of SOUTHAMPTON *after his arraignment; taken before the Earl of* NOTTINGHAM, *Lord High Admiral; Sir* ROBERT CECIL, *principal Secretary; and Mr.* JOHN HERBERT, *second Secretary of Estate.*

Sir Christopher Blunt being hurt, and lying in the castle of Dublin, in a chamber which had been mine, the Earl of Essex one day took me thither with him, where being none but we three, he told us, He found it necessary for him to go into England, and thought it fit to carry with him as much of the army as he could conveniently transport, to go on shore with him to Wales, and there to make good his landing with those, till he could send for more; not doubting but his army would so increase in a small time, that he should be able to march to London, and make his conditions as he desired.

To which project I answered, That I held it altogether unfit, as well in respect of his conscience to God, and his love to his country, as his duty to his sovereign, of which he, of all men, ought to have greatest regard, seeing her majesty's favours to him had been so extraordinary: wherefore I could never give any consent unto it. Sir Christopher Blunt joined with me in this opinion.

Exam. per NOTTINGHAM, RO. CECIL,
J. HERBERT.

The speech of Sir CHRISTOPHER BLUNT, *at the time of his death, as near as it could be remembered, March* 18, 1600.

My lords, and you that be present, although I must confess, that it were better fitting the little time I have to breathe, to bestow the same in asking God forgiveness for my manifold and abominable sins, than to use any other discourse, especially having both an imperfection of speech, and, God knows, a weak memory, by reason of my late grievous wound: yet, to satisfy all those that are present, what course hath been held by me in this late enterprise, because I was said to be an instigator and setter on of the late earl, I will truly, and upon the peril of my soul, speak the truth.

It is true, that the first time that ever I understood of any dangerous discontentment in my Lord of Essex, was about three years ago, at Wanstead, upon his coming one day from Greenwich. At that time he spake many things unto me, but descended into no particulars, but in general terms.

After which time he never brake with me in any matter tending to the alteration of the state, I protest before God, until he came into Ireland, other than I might conceive, that he was of an ambitious and discontented mind. But when I lay at the castle of Thomas Lee, called Reban, in Ireland, grievously hurt, and doubted of my life, he came to visit me, and then began to acquaint me with his intent.

[As he thus spake, the sheriff began to interrupt him, and told him the hour was past. But my Lord Gray, and Sir Walter Raleigh, captain of the guard, called to the sheriff, and required him not to interrupt him, but to suffer him quietly to finish his prayers and confessions. Sir Christopher Blunt said, Is Sir Walter Raleigh there? Those on the scaffold answered, Yea. To whom Sir Christopher Blunt spake on this manner:]

Sir Walter Raleigh, I thank God that you are present: I had an infinite desire to speak with you, to ask you forgiveness ere I died, both for the wrong done you, and for my particular ill intent towards you: I beseech you forgive me.

Sir Walter Raleigh answered, That he most willingly forgave him, and besought God to forgive him, and to give him his divine comfort: protesting before the Lord, That whatsoever Sir Christopher Blunt meant towards him, for his part he never had any ill intent towards him: and farther said to Sir Christopher Blunt, "I pray you without offence let me put you in mind that you have been esteemed, not only a principal provoker and persuader of the Earl of Essex in all his undutiful courses, but especially an adviser in that which had been confessed of his purpose to transport a great part of her majesty's army out of Ireland into England, to land at Milford, and thence to turn it against her sacred person. You shall do well to tell the truth, and to satisfy the world." To which he answered thus:

Sir, if you will give me patience, I will deliver a truth, speaking now my last, in the presence of God, in whose mercy I trust. [And then he directed himself to my Lord Gray and my Lord Compton, and the rest that sat on horseback near the scaffold.]

When I was brought from Reban to Dublin, and lodged in the castle, his lordship and the Earl of Southampton came to visit me; and to be short, he began thus plainly with me: That he intended to transport a choice part of the army of Ireland into England, and land them in Wales, at Milford or thereabouts; and so securing his descent thereby, would gather such other forces as might enable him to march to London. To which, I protest before the Lord God, I made this or the like answer: That I would that night consider of it; which I did.

And the next day the earls came again: I told them, That such an enterprise, as it was most dangerous, so would it cost much blood, as I could not like of it; besides many hazards, which at this time I cannot remember unto you, neither

will the time permit it. But I rather advised him to go over himself with a good train, and make sure of the court, and then make his own conditions.

And although it be true, that, as we all protested in our examinations and arraignments, we never resolved of doing hurt to her majesty's person, for in none of our consultations was there set down any such purpose; yet, I knew, and must confess, if we had failed of our ends, we should, rather than have been disappointed, even have drawn blood from herself. From henceforward he dealt no more with me herein, until he was discharged of his keeper at Essex House. And then he again asked mine advice, and disputed the matter with me; but resolved not. I went then into the country, and before he sent for me, which was some ten days before his rebellion, I never heard more of the matter. And then he wrote unto me to come up, upon pretence of making some assurances of land, and the like. I will leave the rest unto my confessions, given to that honourable lord admiral, and worthy Mr. Secretary, to whom I beseech you, Sir Walter Raleigh, commend me; I can requite their favourable and charitable dealing with me, with naught else but my prayers for them. And I beseech God of his mercy, to save and preserve the queen, who hath given comfort to my soul, in that I hear she hath forgiven me all, but the sentence of the law, which I most worthily deserved, and do most willingly embrace; and hope that God will have mercy and compassion on me, who have offended him as many ways as ever sinful wretch did. I have led a life so far from his precepts, as no sinner more. God forgive it me, and forgive me my wicked thoughts, my licentious life, and this right arm of mine, which, I fear me, hath drawn blood in this last action. And I beseech you all bear witness, that I die a Catholic, yet so, as I hope to be saved only by the death and passion of Christ, and by his merits, not ascribing any thing to mine own works. And I trust you are all good people, and your prayers may profit me. Farewell, my worthy Lord Gray, and my Lord Compton, and to you all; God send you both to live long in honour. I will desire to say a few prayers, and embrace my death most willingly.

With that he turned from the rail towards the executioner; and the minister offering to speak with him, he came again to the rail, and besought that his conscience might not be troubled, for he was resolved; which he desired for God's sake. Whereupon commandment was given, that the minister should not interrupt him any farther. After which he prepared himself to the block, and so died very manfully and resolutely.

An Abstract out of the Earl of Essex's confession under his own hand.

Upon Saturday, the twenty-first of February, after the late Earl of Essex had desired us to come to him, as well to deliver his knowledge of those treasons, which he had formerly denied at the bar, as also to recommend his humble and earnest request, that her majesty would be pleased, out of her grace and favour, to suffer him to die privately in the Tower; he did marvellous earnestly desire, that we would suffer him to speak unto Cuffe, his secretary: against whom he vehemently complained unto us, to have been a principal instigator to these violent courses which he had undertaken. Wherein he protested, that he chiefly desired that he might make it appear that he was not the only persuader of those great offences which they had committed; but that Blunt, Cuffe, Temple, besides those other persons who were at the private conspiracy at Drury House, to which, though these three were not called, yet, they were privy, had most malicious and bloody purposes to subvert the state and government: which could not have been prevented, if his project had gone forward.

This request being granted him, and Cuffe brought before him, he there directly and vehemently charged him; and among other speeches used these words: "Henry Cuffe, call to God for mercy, and to the queen, and deserve it by declaring truth. For I, that must now prepare for another world, have resolved to deal clearly with God and the world: and must needs say this to you; You have been one of the chiefest instigators of me to all these my disloyal courses into which I have fallen."

Testified by Tho. Egerton, C. S.
Tho. Buckhurst,
Nottingham,
Ro. Cecil.

The Earl of Essex his confession to three ministers, whose names are underwritten, the 25th of February, 1600.

The late Earl of Essex thanked God most heartily, that he had given him a deeper insight into his offence, being sorry he had so stood upon his justification at his arraignment, for he was since that become another man.

He thanked God that his course was so prevented: for if his project had taken effect, God knows, said he, what harm it had wrought in the realm.

He humbly thanked her majesty, that he should die in so private a manner, lest the acclamation of the people might have been a temptation unto him. To which he added, that all popularity and trust in man was vain; the experience whereof himself had felt.

He acknowledged, with thankfulness to God that he was thus justly spewed out of the realm.

He publicly in his prayer and protestation, as also privately, aggravated the detestation of his offence; and especially in the hearing of them

that were present at the execution, he exaggerated it with four epithets, desiring God to forgive him his great, his bloody, his crying, and his infectious sin; which word "infectious" he privately had explained to us, that it was a leprosy that had infected far and near.

THOMAS MONFORD, WILLIAM BARLOW,
ABDY ASHTON, his chaplain.

ADVICE TO SIR GEORGE VILLIERS,

AFTERWARDS DUKE OF BUCKINGHAM,

WHEN HE BECAME FAVOURITE TO KING JAMES;

RECOMMENDING MANY IMPORTANT INSTRUCTIONS HOW TO GOVERN HIMSELF IN THE STATION OF PRIME MINISTER.

WRITTEN BY SIR FRANCIS BACON, ON THE IMPORTUNITY OF HIS PATRON AND FRIEND.

NOBLE SIR,

What you requested of me by word, when I last waited on you, you have since renewed by your letters. Your requests are commands unto me: and yet the matter is of that nature, that I find myself very unable to serve you therein as you desire. It hath pleased the king to cast an extraordinary eye of favour upon you, and you express yourself very desirous to win upon the judgment of your master, and not upon his affections only. I do very much commend your noble ambition herein; for favour so bottomed is like to be lasting; whereas, if it be built upon the sandy foundation of personal respects only, it cannot be long-lived.

[* My lord, when the blessing of God, to whom, in the first place, I know you ascribe your preferment, and the king's favour, purchased by your noble parts, promising as much as can be expected from a gentleman, had brought you to this high pitch of honour, to be in the eye and ear, and even in the bosom of your gracious master: and you had found by experience the trouble of all men's confluence, and for all matters, to yourself, as a mediator between them and their sovereign you were pleased to lay this command upon me; first, in general, to give you my poor advice for your carriage in so eminent a place, and of so much danger, if not wisely discharged. Next, in particular, by what means to give despatches to suitors of all sorts, for the king's best service, the suitors' satisfaction, and your own ease. I humbly return you mine opinion in both these, such as a hermit, rather than a courtier can render.]

Yet in this you have erred, in applying yourself to me, the most unworthy of your servants, to give assistance upon so weighty a subject.

You know, I am no courtier, nor versed in state affairs: my life hitherto hath rather been contemplative than active; I have rather studied books than men; I can but guess, at the most, at these things in which you desire to be advised; nevertheless, to show my obedience, though with the hazard of my discretion, I shall yield unto you.

Sir, in the first place, I shall be bold to put you in mind of the present condition you are in. You are not only a courtier, but a bed-chamber man, and so are in the eye and ear of your master; but you are also a favourite; the favourite of the time, and so are in his bosom also. The world hath so voted you, and doth so esteem of you; for kings and great princes, even the wisest of them, have had their friends, their favourites, their privadoes, in all ages; for they have their affections as well as other men. Of these they make several uses; sometimes to communicate and debate their thoughts with them, and to ripen their judgments thereby; and sometimes to ease their cares by imparting them; and sometimes to interpose them between themselves and the envy or malice of their people; for kings cannot err; that must be discharged upon the shoulders of their ministers; and they who are nearest unto them must be content to bear the greatest load. [Remember then what your true condition is. The king himself is above the reach of his people, but cannot be above their censures; and you are his shadow, if either he commit an error, and is loath to avow it, but excuses it upon his ministers, of which you are first in the eye; or you commit the fault, or have willingly permitted it, and must suffer for it; and so perhaps you may be offered a sacrifice to appease the multitude.] But truly, sir, I do not believe or suspect that you are chosen to this eminency out of the last of these considerations; for you serve such a master, who by his wisdom and goodness

* What is found in crotchets is borrowed from the original edition, published in 4to, 1661.

is as free from the malice or envy of his subjects, as, I think, I may truly say, ever any king was, who hath sat upon his throne before him. But I am confident his majesty hath cast his eyes upon you, as finding you to be such as you should be, or hoping to make you to be such as he would have you to be; for this I may say, without flattery, your outside promiseth as much as can be expected from a gentleman; but be it in the one respect or other, it belongeth to you to take care of yourself, and to know well what the name of favourite signifies. If you be chosen upon the former respects, you have reason to take care of your actions and deportment, out of your gratitude for the king's sake; but if out of the latter, you ought to take the greater care for your own sake.

You are as a new-risen star, and the eyes of all men are upon you; let not your own negligence make you fall like a meteor.

[Remember well the great trust you have undertaken; you are as a continual sentinel, always to stand upon your watch to give him true intelligence. If you flatter him, you betray him; if you conceal the truth of those things from him which concern his justice or his honour, although not the safety of his person, you are as dangerous a traitor to his state, as he that riseth in arms against him. A false friend is more dangerous than an open enemy: kings are styled gods upon earth, not absolute, but "Dixi, Dii estis;" and the next words are, "sed moriemini sicut homines;" they shall die like men, and then all their thoughts perish. They cannot possibly see all things with their own eyes, nor hear all things with their own ears; they must commit many great trusts to their ministers. Kings must be answerable to God Almighty, to whom they are but vassals, for their actions, and for their negligent omissions: but the ministers to kings, whose eyes, ears, and hands they are, must be answerable to God and man for the breach of their duties, in violation of their trusts, whereby they betray them. Opinion is a master wheel in these cases: that courtier who obtained a boon of the emperor, that he might every morning at his coming into his presence humbly whisper him in the ear and say nothing, asked no unprofitable suit for himself: but such a fancy raised only by opinion cannot be long-lived, unless the man have solid worth to uphold it; otherwise, when once discovered it vanisheth suddenly. But when a favourite in court shall be raised upon the foundation of merits, and together with the care of doing good service to the king, shall give good despatches to the suitors, then can he not choose but prosper.]

The contemplation then of your present condition must necessarily prepare you for action: what time can be well spared from your attendance on your master, will be taken up by suitors whom you cannot avoid nor decline without reproach. For if you do not already, you will soon find the throng of suitors attend you; for no man, almost, who hath to do with the king, will think himself safe, unless you be his good angel, and guide him; or at least that you be not a "malus genius" against him: so that, in respect of the king your master, you must be very wary that you give him true information; and if the matter concern him in his government, that you do not flatter him: if you do, you are as great a traitor to him in the court of heaven, as he that draws his sword against him: and in respect of the suitors which shall attend you, there is nothing will bring you more honour and more ease, than to do them what right in justice you may, and with as much speed as you may: for, believe it, sir, next to the obtaining of the suit, a speedy and gentle denial, when the case will not bear it, is the most acceptable to suitors: they will gain by their despatch; whereas else they shall spend their time and money in attending, and you will gain, in the ease you will find in being rid of their importunity. But if they obtain what they reasonably desired, they will be doubly bound to you for your favour; "Bis dat qui cito dat," it multiplies the courtesy, to do it with good words and speedily.

That you may be able to do this with the best advantage, my humble advice is this; when suitors come unto you, set apart a certain hour in a day to give them audience: if the business be light and easy, it may by word only be delivered, and in a word be answered; but if it be either of weight or of difficulty, direct the suitor to commit it to writing, if it be not so already, and then direct him to attend for his answer at a set time to be appointed, which would constantly be observed, unless some matter of great moment do interrupt it. When you have received the petitions, and it will please the petitioners well, to have access unto you to deliver them into your own hand, let your secretary first read them, and draw lines under the material parts thereof; for the matter, for the most part, lies in a narrow room. The petitions being thus prepared, do you constantly set apart an hour in a day to peruse those petitions; and after you have ranked them into several files, according to the subject matter, make choice of two or three friends, whose judgments and fidelities you believe you may trust in a business of that nature; and recommend it to one or more of them, to inform you of their opinions, and of their reasons for or against the granting of it. And if the matter be of great weight indeed, then it would not be amiss to send several copies of the same petition to several of your friends, the one not knowing what the other doth, and desire them to return their answers to you by a certain time, to be prefixed, in writing; so shall you receive an impartial answer, and by comparing the one with the other, as out of "responsa prudentium," you shall both

discern the abilities and faithfulness of your friends, and be able to give a judgment thereupon as an oracle. But by no means trust to your own judgment alone; for no man is omniscient: nor trust only to your servants, who may mislead you or misinform you; by which they may perhaps gain a few crowns, but the reproach will lie upon yourself, if it be not rightly carried.

For the facilitating of your despatches, my advice is farther, that you divide all the petitions, and the matters therein contained, under several heads: which, I conceive, may be fitly ranked into these eight sorts.

I. Matters that concern religion, and the church and churchmen.

II. Matters concerning justice, and the laws, and the professors thereof.

III. Councillors, and the council table, and the great offices and officers of the kingdom.

IV. Foreign negotiations and embassies.

V. Peace and war, both foreign and civil, and in that the navy and forts, and what belongs to them.

VI. Trade at home and abroad.

VII. Colonies, or foreign plantations.

VIII. The court and curiality.

And whatsoever will not fall naturally under one of these heads, believe me, sir, will not be worthy of your thoughts, in this capacity, we now speak of. And of these sorts, I warrant you, you will find enough to keep you in business.

I begin with the first, which concerns religion.

1. In the first place, be you yourself rightly persuaded and settled in the true Protestant religion, professed by the Church of England; which doubtless is as sound and orthodox in the doctrine thereof, as any Christian church in the world.

[For religion, if any thing be offered to you touching it, or touching the church, or churchmen, or church government, rely not only upon yourself, but take the opinion of some grave and eminent divines, especially such as are sad and discreet men, and exemplary for their lives.]

2. In this you need not be a monitor to your gracious master the king: the chiefest of his imperial titles is, to be The Defender of the Faith, and his learning is eminent, not only above other princes, but above other men; be but his scholar, and you are safe in that.

[If any question be moved concerning the doctrine of the Church of England expressed in the thirty-nine articles, give not the least ear to the movers thereof: that is so soundly and so orthodoxly settled, as cannot be questioned without extreme danger to the honour and stability of our religion; which hath been sealed with the blood of so many martyrs and confessors, as are famous through the Christian world. The enemies and underminers thereof are the Romish Catholic, so styling themselves, on the one hand, whose tenets are inconsistent with the truth of religion professed and protested by the Church of England, whence we are called Protestants; and the Anabaptists, and separatists, and sectaries on the other hand, whose tenents are full of schism, and inconsistent with monarchy: for the regulating of either, there needs no other coercion than the due execution of the laws already established by parliament.]

3. For the discipline of the Church of England by bishops, &c., I will not positively say, as some do, that it is "jure divino;" but this I say and think "ex animo," that it is the nearest to apostolical truth; and confidently I shall say, it is fittest for monarchy of all others. I will use no other authority to you, than that excellent proclamation set out by the king himself in the first year of his reign, and annexed before the book of Common Prayer, which I desire you to read; and if at any time there shall be the least motion made for innovation, to put the king in mind to read it himself: it is most dangerous in a state, to give ear to the least alteration in government.

[If any attempt be made to alter the discipline of our church, although it be not an essential part of our religion, yet, it is so necessary not to be rashly altered, as the very substance of religion will be interested in it: therefore, I desire you, before any attempt be made of an innovation by your means, or by any intercession to your master, that you will first read over, and his majesty call to mind that wise and weighty proclamation, which himself penned, and caused to be published in the first year of his reign, and is prefixed in print before the book of Common Prayer, of that impression, in which you will find so prudent, so weighty reasons, not to hearken to innovations, as will fully satisfy you, that it is dangerous to give the least ear to such innovators; but it is desperate to be misled by them: and to settle your judgment, mark but the admonition of the wisest of men, King Solomon, Prov. xxiv. 21. "My son, fear God and the king, and meddle not with those who are given to change."]

4. Take heed, I beseech you, that you be not an instrument to countenance the Romish Catholics. I cannot flatter, the world believes that some near in blood to you are too much of that persuasion; you must use them with fit respects, according to the bonds of nature; but you are of kin, and so a friend to their persons, not to their errors.

5. The archbishops and bishops, next under the king, have the government of the church and ecclesiastical affairs: be not you the mean to prefer any to those places for any by-respects; but only for their learning, gravity, and worth: their lives and doctrine ought to be exemplary.

6. For deans, and canons or prebends of cathedral churches; in their first institution they were of great use in the church; they were not

only to be of counsel with the bishop for his revenue, but chiefly for his government in causes ecclesiastical: use your best means to prefer such to those places who are fit for that purpose, men eminent for their learning, piety, and discretion, and put the king often in mind thereof; and let them be reduced again to their first institution.

7. You will be often solicited, and perhaps importuned to prefer scholars to church living: you may further your friends in that way, "cæteris paribus;" otherwise remember, I pray, that these are not places merely of favour; the charge of souls lies upon them; the greatest account whereof will be required at their own hands; but they will share deeply in their faults who are the instruments of their preferment.

8. Besides the Romish Catholics, there is a generation of sectaries, the Anabaptists, Brownists, and others of their kinds; they have been several times very busy in this kingdom, under the colour of zeal for reformation of religion: the king your master knows their disposition very well; a small touch will put him in mind of them; he had experience of them in Scotland, I hope he will beware of them in England; a little countenance or connivancy sets them on fire.

9. Order and decent ceremonies in the church are not only comely, but commendable; but there must be great care not to introduce innovations, they will quickly prove scandalous; men are naturally over-prone to suspicion; the true Protestant religion is seated in the golden mean; the enemies unto her are the extremes on either hand.

10. The persons of churchmen are to be had in due respect for their work's sake, and protected from scorn; but if a clergyman be loose and scandalous, he must not be patronized nor winked at; the example of a few such corrupt many.

11. Great care must be taken, that the patrimony of the church be not sacrilegiously diverted to lay uses: his majesty in his time hath religiously stopped a leak that did much harm, and would else have done more. Be sure, as much as in you lies, stop the like upon all occasions.

12. Colleges and schools of learning are to be cherished and encouraged, there to breed up a new stock to furnish the church and commonwealth when the old store are transplanted. This kingdom hath in later ages been famous for good literature; and if preferment shall attend the deservers, there will not want supplies.

II. Next to religion, let your care be to promote justice. By justice and mercy is the king's throne established.

1. Let the rule of justice be the laws of the land, an impartial arbiter between the king and his people, and between one subject and another: I shall not speak superlatively of them, lest I be suspected of partiality, in regard to my own profession; but this I may truly say, They are second to none in the Christian world.

[They are the best, the equallest in the world between prince and people; by which the king hath the justest prerogative, and the people the best liberty; and if at any time there be an unjust deviation, "Hominis est vitium, non professionis."]

2. And as far as it may lie in you, let no arbitrary power be intruded: the people of this kingdom love the laws thereof, and nothing will oblige them more, than a confidence of the free enjoying of them; what the nobles upon an occasion once said in parliament, "Nolumus leges Angliæ mutare," is imprinted in the hearts of all the people.

3. But, because the life of the laws lies in the due execution and administration of them, let your eye be, in the first place, upon the choice of good judges: these properties had they need to be furnished with; to be learned in their profession, patient in hearing, prudent in governing, powerful in their elocution to persuade and satisfy both the parties and hearers; just in their judgment: and, to sum up all, they must have these three attributes; they must be men of courage, fearing God, and hating covetousness; an ignorant man cannot, a coward dares not be a good judge.

4. By no means be you persuaded to interpose yourself, either by word or letter, in any cause depending, or like to be depending in any court of justice, nor suffer any other great man to do it where you can hinder it, and by all means dissuade the king himself from it, upon the importunity of any for themselves or their friends: if it should prevail, it perverts justice; but if the judge be so just, and of such courage, as he ought to be, as not to be inclined thereby, yet, it always leaves a taint of suspicion behind it; judges must be as chaste as Cæsar's wife, neither to be, nor to be suspected to be unjust; and, sir, the honour of the judges in their judicature is the king's honour, whose person they represent.

5. There is great use of the service of the judges in their circuits, which are twice in the year held throughout the kingdom: the trial of causes between party and party, or delivering of the jails in the several counties, are of great use for the expedition of justice: yet, they are of much more use for the government of the counties through which they pass, if that were well thought upon.

6. For if they had instructions to that purpose, they might be the best intelligencers to the king of the true state of his whole kingdom, of the disposition of the people, of their inclinations, of their intentions and motions, which are necessary to be truly understood.

7. To this end I could wish, that against every

circuit all the judges should, sometimes by the king himself, and sometimes by the lord chancellor or lord keeper, in the king's name, receive a charge of those things which the present times did much require; and at their return should deliver a faithful account thereof, and how they found and left the counties through which they passed, and in which they kept their assizes.

8. And that they might the better perform this work, which might be of great importance, it will not be amiss that sometimes this charge be public, as it useth to be in the Star Chamber, at the end of the terms next before the circuit begins, where the king's care of justice, and the good of his people, may be published; and that sometimes also it may be private, to communicate to the judges some things not so fit to be publicly delivered.

9. I could wish also, that the judges were directed to make a little longer stay in a place than usually they do; a day more in a county would be a very good addition; although their wages for their circuits were increased in proportion: it would stand better with the gravity of their employment; whereas now they are sometimes enforced to rise over-early, and to sit overlate, for the despatch of their business, to the extraordinary trouble of themselves and of the people, their times indeed not being "horæ juridicæ;" and, which is the main, they would have the more leisure to inform themselves, "quasi aliud agentes," of the true estate of the country.

10. The attendance of the sheriffs of the counties accompanied with the principal gentlemen, in a comely, not a costly equipage, upon the judges of assize at their coming to the place of their sitting, and at their going out, is not only a civility, but of use also: it raiseth a reverence to the persons and places of the judges, who coming from the king himself on so great an errand, should not be neglected.

11. If any sue to be made a judge, for my own part, I should suspect him: but if either directly or indirectly he should bargain for a place of judicature, let him be rejected with shame; "Vendere jure potest, emerat ille prius."

12. When the place of a chief judge of a court becomes vacant, a puisne judge of that court, or of another court, who hath approved himself fit and deserving, should be sometimes preferred; it would be a good encouragement for him, and for others by his example.

13. Next to the judge, there would be care used in the choice of such as are called to the degree of sergeants at law, for such they must be first before they be made judges; none should be made serjeants but such as probably might be held fit to be judges afterwards, when the experience at the bar hath fitted them for the bench: therefore by all means cry down that unworthy course of late times used, that they should pay moneys for it; it may satisfy some courtiers, but it is no honour to the person so preferred, nor to the king, who thus prefers them.

14. For the king's counsel at the law, especially his attorney and solicitor general, I need say nothing: their continual use for the king's service, not only for his revenue, but for all the parts of his government, will put the king, and those who love his service, in mind to make choice of men every way fit and able for that employment; they had need to be learned in their profession, and not ignorant in other things; and to be dexterous in those affairs whereof the despatch is committed to them.

15. The king's attorney of the court of wards is in the true quality of the judges; therefore what hath been observed already of judges, which are intended principally of the three great courts of law at Westminster, may be applied to the choice of the attorney of this court.

16. The like for the attorney of the duchy of Lancaster, who partakes of both qualities, partly of a judge in that court, and partly of an attorney general for so much as concerns the proper revenue of the duchy.

17. I must not forget the judges of the four circuits in the twelve shires of Wales, who, although they are not of the first magnitude, nor need be of the degree of the coif, only the chief justice of Chester, who is one of their number, is so, yet are they considerable in the choice of them, by the same rules as the other judges are; and they sometimes are, and fitly may be transplanted into the higher courts.

18. There are many courts, as you see, some superior, some provincial, and some of a lower orb: it were to be wished, and is fit to be so ordered, that every of them keep themselves within their proper spheres. The harmony of justice is then the sweetest, when there is no jarring about the jurisdiction of the courts; which methinks wisdom cannot much differ upon, their true bounds being for the most part so clearly known.

19. Having said thus much of the judges, somewhat will be fit to put you in mind concerning the principal ministers of justice: and in the first, of the high sheriffs of the counties, which have been very ancient in this kingdom; I am sure before the conquest; the choice of them I commend to your care, and that at fit times you put the king in mind thereof; that as near as may be they be such as are fit for those places: for they are of great trust and power; the "posse comitatus," the power of the whole county being legally committed unto him.

20. Therefore it is agreeable with the intention of the law, that the choice of them should be by the commendation of the great officers of the kingdom, and by the advice of the judges, who are presumed to be well read n the condition of

the gentry of the whole kingdom: and although the king may do it of himself, yet the old way is the good way.

21. But I utterly condemn the practice of the later times, which hath lately crept into the court, at the back-stairs, that some who are pricked for sheriffs, and were fit, should get out of the bill; and others who were neither thought upon, nor worthy to be, should be nominated, and both for money.

22. I must not omit to put you in mind of the lord lieutenants and deputy lieutenants of the counties: their proper use is for ordering the military affairs, in order to an invasion from abroad, or a rebellion or sedition at home; good choice should be made of them, and prudent instructions given to them, and as little of the arbitrary power, as may be, left unto them; and that the muster-masters, and other officers under them, encroach not upon the subject; that will detract much from the king's service.

23. The justices of peace are of great use. Anciently, there were conservators of the peace; these are the same, saving that several acts of parliament have altered their denomination, and enlarged their jurisdiction in many particulars: the fitter they are for the peace of the kingdom, the more heed ought to be taken in the choice of them.

24. But, negatively, this I shall be bold to say, that none should be put into either of those commissions with an eye of favour to their persons, to give them countenance or reputation in the places where they live, but for the king's service sake; nor any put out for the disfavour of any great man: it hath been too often used, and hath been no good service to the king.

25. A word more, if you please to give me leave, for the true rules of moderation of justice on the king's part. The execution of justice is committed to his judges, which seemeth to be the severer part; but the milder part, which is mercy, is wholly left in the king's immediate hand: and justice and mercy are the true supporters of his royal throne.

26. If the king shall be wholly intent upon justice, it may appear with an over-rigid aspect; but if he shall be over-remiss and easy, it draweth upon him contempt. Examples of justice must be made sometimes for terror to some; examples of mercy sometimes, for comfort to others; the one procures fear, and the other love. A king must be both feared and loved, else he is lost.

27. The ordinary courts of justice I have spoken of, and of their judges and judicature: I shall put you in mind of some things touching the high court of parliament in England, which is superlative; and therefore it will behoove me to speak the more warily thereof.

28. For the institution of it, it is very ancient in this kingdom: it consisteth of the two Houses, of peers and commons, as the members; and of the king's majesty, as the head of that great body: by the king's authority alone, and by his writs, they are assembled, and by him alone are they prorogued and dissolved; but each House may adjourn itself.

29. They being thus assembled, are more properly a council to the king, the great council of the kingdom, to advise his majesty in those things of weight and difficulty, which concern both the king and people, than a court.

30. No new laws can be made, nor old laws abrogated or altered, but by common consent in parliament, where bills are prepared and presented to the two Houses, and then delivered, but nothing is concluded but by the king's royal assent; they are but embryos, it is he giveth life unto them.

31. Yet the House of Peers hath a power of judicature in some cases: properly to examine, and then to affirm; or, if there be cause, to reverse the judgments which have been given in the court of King's Bench, which is the court of highest jurisdiction in the kingdom for ordinary judicature; but in these cases it must be done by writ of error "in parliamento:" and thus the rule of their proceedings is not "absoluta potestas," as in making new laws, in that conjuncture as before, but "limitata potestas," according to the known laws of the land.

32. But the House of Commons have only power to censure the members of their own House, in point of election, or misdemeanors in or towards that House; and have not, nor ever had, power so much as to administer an oath to prepare a judgment.

33. The true use of parliaments in this kingdom is very excellent; and they would be often called, as the affairs of the kingdom shall require; and continued as long as is necessary and no longer: for then they be but burdens to the people, by reason of the privileges justly due to the members of the two Houses and their attendants, which, their just rights and privileges are religiously to be observed and maintained: but if they should be unjustly enlarged beyond their true bounds, they might lessen the just power of the crown, it borders so near upon popularity.

34. All this while I have spoken concerning the common laws of England, generally and properly so called, because it is most general and common to almost all cases and causes, both civil and criminal: but there is also another law, which is called the civil or ecclesiastical law, which is confined to some few heads, and that is not to be neglected: and although I am a professor of the common law, yet am I so much a lover of truth and of learning, and of my native country, that I do heartily persuade that the professors of that law, called civilians, because the civil law is their guide, should not be discountenanced nor

discouraged: else, whensoever we shall have aught to do with any foreign king or state, we shall be at a miserable loss, for want of learned men in that profession.

III. I come now to the consideration of those things which concern counsellors of state, the council table, and the great offices and officers of the kingdom; which are those who for the most part furnish out that honourable board.

1. Of counsellors there are two sorts: the first, "consiliarii nati," as I may term them, such are the Prince of Wales, and others of the king's sons, when he hath more, of these I speak not, for they are naturally born to be counsellors to the king, to learn the art of governing betimes.

2. But the ordinary sort of counsellors are such as the king, out of a due consideration of their worth and abilities, and, withal, of their fidelities to his person and to his crown, calleth to be of council with him in his ordinary government. And the council-table is so called from the place where they ordinarily assemble and sit together; and their oath is the only ceremony used to make them such, which is solemnly given unto them at their first admission: these honourable persons are from thenceforth of that board and body: they cannot come until they be thus called, and the king at his pleasure may spare their attendance; and he may dispense with their presence there, which at their own pleasure they may not do.

3. This being the quality of their service, you may easily judge what care the king should use in his choice of them. It behooveth that they be persons of great trust and fidelity, and also of wisdom and judgment, who shall thus assist in bearing up the king's throne, and of known experience in public affairs.

4. Yet it may not be unfit to call some of young years, to train them up in that trade, and so fit them for those weighty affairs against the time of greater maturity, and some also for the honour of their persons: but these two sorts are not to be tied to so strict attendance as the others, from whom the present despatch of business is expected.

5. I could wish that their number might not be so over-great, the persons of the counsellors would be the more venerable: and I know that Queen Elizabeth, in whose time I had the happiness to be born and to live many years, was not so much observed for having a numerous as a wise council.

6. The duty of a privy-counsellor to a king, I conceive, is not only to attend the council-board at the times appointed, and there to consult of what shall be propounded; but also to study those things which may advance the king's honour and safety, and the good of the kingdom, and to communicate the same to the king, or to his fellow-counsellors, as there shall be occasion. And this, sir, will concern you more than others, by how much you have a larger share in his affections.

7. And one thing I shall be bold to desire you to recommend to his majesty: that when any new thing shall be propounded to be taken into consideration, that no counsellor should suddenly deliver any positive opinion thereof: it is not so easy with all men to retract their opinions, although there shall be cause for it: but only to hear it, and at the most but to break it, at first, that it may be the better understood against the next meeting.

8. When any matter of weight hath been debated, and seemeth to be ready for a resolution; I wish it may not be at that sitting concluded, unless the necessity of the time press it, lest upon second cogitations there should be cause to alter; which is not for the gravity and honour of that board.

9. I wish also that the king would be pleased sometimes to be present at that board; it adds a majesty to it; and yet not to be too frequently there; that would render it less esteemed when it is become common: besides, it may sometimes make the counsellors not be so free in their debates in his presence as they would be in his absence.

10. Besides the giving of counsel, the counsellors are bound by their duties "ex vi termini," as well as by their oaths, to keep counsel; therefore are they called "de privato consilio regis," and "a secretioribus consiliis regis."

11. One thing I add, in the negative, which is not fit for that board, the entertaining of private causes of "meum et tuum;" those should be left to the ordinary course and courts of justice.

12. As there is great care to be used for the counsellors themselves to be chosen, so there is of the clerks of the council also, for the secreting of their consultations: and, methinks, it were fit that his majesty be speedily moved to give a strict charge, and to bind it with a solemn order, if it be not already so done, that no copies of the orders of that table be delivered out by the clerks of the council but by the order of the board; nor any, not being a counsellor, or a clerk of the council, or his clerk, to have access to the council books: and to that purpose, that the servants attending the clerks of the council be bound to secrecy, as well as their masters.

13. For the great offices and officers of the kingdom, I shall say little; for the most part of them are such as cannot well be severed from the counsellorship; and therefore the same rule is to be observed for both, in the choice of them. In the general, only, I advise this, let them be set in those places for which they are probably the most fit.

14. But in the quality of the persons, I conceive it will be most convenient to have some of every sort, as in the time of Queen Elizabeth it

was: one bishop at the least, in respect of questions touching religion or church government; one or more skilled in the laws; some for martial affairs: and some for foreign affairs: by this mixture one will help another in all things that shall there happen to be moved. But if that should fail, it will be a safe way, to consult with some other able persons well versed in that point which is the subject of their consultation; which yet may be done so warily, as may not discover the main end therein.

IV. In the next place, I shall put you in mind of foreign negotiations, and embassies to or with foreign princes or states; wherein I shall be little able to serve you.

1. Only, I will tell you what was the course in the happy days of Queen Elizabeth, whom it will be no disreputation to follow: she did vary, according to the nature of the employment, the quality of the persons she employed; which is a good rule to go by.

2. If it were an embassy of gratulation or ceremony, which must not be neglected, choice was made of some noble person, eminent in place and able in purse; and he would take it as a mark of favour, and discharge it without any great burden to the queen's coffers, for his own honour's sake.

3. But if it were an embassy of weight, concerning affairs of state, choice was made of some sad person of known judgment, wisdom, and experience; and not of a young man not weighed in state matters; nor of a mere formal man, whatsoever his title or outside were.

4. Yet in company of such, some young towardly noblemen or gentlemen were usually sent also, as assistants or attendants, according to the quality of the persons; who might be thereby prepared and fitted for the like employment, by this means, at another turn.

5. In their company were always sent some grave and sad men, skilful in the civil laws, and some in the languages, and some who had been formerly conversant in the courts of those princes, and knew their ways; these were assistants in private, but not trusted to manage the affairs in public; that would detract from the honour of the principal ambassador.

6. If the negotiation were about merchants' affairs, then were the persons employed for the most part doctors of the civil law, assisted with some other discreet men; and in such, the charge was ordinarily defrayed by the company or society of merchants whom the negotiation concerned.

7. If lieger ambassadors or agents were sent to remain in or near the courts of those princes or states, as it was ever held fit, to observe the motions, and to hold correspondence with them, upon all occasions, such were made choice of as were presumed to be vigilant, industrious, and discreet men, and had the language of the place whither they were sent; and with these were sent such as were hopeful to be worthy of the like employment at another time.

8. Their care was, to give true and timely intelligence of all occurrences, either to the queen herself, or to the secretaries of state, unto whom they had their immediate relation.

9. Their charge was always borne by the queen, duly paid out of the exchequer, in such proportion, as, according to their qualities and places, might give them an honourable subsistence there: but for the reward of their service, they were to expect it upon their return, by some such preferment as might be worthy of them, and yet be little burden to the queen's coffers or revenues.

10. At their going forth they had their general instructions in writing, which might be communicated to the ministers of that state whither they were sent; and they had also private instructions upon particular occasions: and at their return, they did always render an account of some things to the queen herself, of some things to the body of the council, and of some others to the secretaries of state; who made use of them, or communicated them, as there was cause.

11. In those days there was a constant course held, that, by the advice of the secretaries, or some principal counsellors, there were always sent forth into several parts beyond the seas some young men, of whom good hopes were conceived of their towardliness, to be trained up, and made fit for such public employments, and to learn the languages. This was at the charge of the queen, which was not much; for they travelled but as private gentlemen: and as by their industry their deserts did appear, so were they farther employed or rewarded. This course I shall recommend unto you, to breed up a nursery of such public plants.

V. For peace and war, and those things which appertain to either; I in my own disposition and profession am wholly for peace, if please God to bless this kingdom therewith, as for many years past he hath done: and

1. I presume I shall not need to persuade you to the advancing of it; nor shall you need to persuade the king your master therein, for that he hath hitherto been another Solomon in this our Israel, and the motto which he hath chosen, "Beati pacifici," shows his own judgment: but he must use the means to preserve it, else such a jewel may be lost.

2. God is the God of peace; it is one of his attributes, therefore by him alone we must pray, and hope to continue it: there is the foundation.

3. And the king must not neglect the just ways

for it; justice is the best protector of it at home, and providence for war is the best prevention of it from abroad.

4. Wars are either foreign or civil. For the foreign war by the king upon some neighbour nation, I hope we are secure. The king, in his pious and just disposition, is not inclinable thereunto. His empire is long enough, bounded with the ocean, as if the very situation thereof had taught the king and people to set up their rests, and say, "Ne plus ultra."

5. And for a war of invasion from abroad; only we must not be over secure; that is the way to invite it.

6. But if we be always prepared to receive an enemy, if the ambition or malice of any should incite him, we may be very confident we shall long live in peace and quietness, without any attempts upon us.

7. To make the preparations hereunto the more assured: in the first place, I will recommend unto you the care of our outworks, the navy royal and shipping of our kingdom, which are the walls thereof; and every great ship is an impregnable fort; and our many safe and commodious ports and havens, in every of these kingdoms, are as the redoubts to secure them.

8. For the body of the ships, no nation of the world doth equal England for the oaken timber wherewith to build them; and we need not borrow of any other iron for spikes or nails to fasten them together; but there must be a great deal of providence used, that our ship timber be not unnecessarily wasted.

9. But for tackling, as sails and cordage, we are beholden to our neighbours for them, and do buy them for our money; that must be foreseen, and laid up in a store against a time of need, and not sought for when we are to use them; but we are much to blame that we make them not at home. Only pitch and tar we have not of our own.

10. For the true art of building of ships, for burden and service both, no nation in the world exceeds us. Shipwrights and all other artisans belonging to that trade must be cherished and encouraged.

11. Powder and ammunition of all sorts we can have at home, and in exchange for other home commodities we may be plentifully supplied from our neighbours, which must not be neglected.

12. With mariners and seamen this kingdom is plentifully furnished. The constant trade of merchandising will furnish us at a need; and navigable rivers will repair the store, both to the navy royal and to the merchants, if they be set on work, and well paid for their labour.

13. Sea captains and commanders, and other officers must be encouraged, and rise by degrees, as their fidelity and industry deserve it.

[Let brave spirits that have fitted themselves for command, either by sea or land, not be laid by, as persons unnecessary for the time; let arms and ammunition of all sorts be provided and stored up, as against a day of battle; let the ports and forts be fitted so, as if by the next wind we should hear of an alarm. Such a known providence is the surest protection. But of all wars, let both prince and people pray against a war in our own bowels. The king by his wisdom, justice, and moderation, must foresee and stop such a storm, and if it fall, must allay it; and the people, by their obedience, must decline it. And for a foreign war, intended by an invasion, to enlarge the bounds of our empire, which are large enough, and are naturally bounded with the ocean, I have no opinion either of the justness or fitness of it; and it were a very hard matter to attempt it with hope of success, seeing the subjects of this kingdom believe it is not legal for them to be enforced to go beyond the seas, without their own consent, upon hope of an unwarranted conquest; but to resist an invading enemy, or to suppress rebels, the subjects may and must be commanded out of the counties where they inhabit. The whole kingdom is but one entire body; else it will necessarily be verified, which elsewhere was asserted, "Dum singuli pugnamus, omnes vincimur."]

14. Our strict league of amity and alliance with our near neighbours, the Hollanders, is a mutual strength to both. The shipping of both in conjuncture, being so powerful, by God's blessing, as no foreigners will venture upon. This league and friendship must inviolably be observed.

15. From Scotland we have had in former times some alarms and inroads into the northern parts of this kingdom; but that happy union of both kingdoms under one sovereign, our gracious king, I hope, hath taken away all occasions of breach between the two nations. Let not the cause arise from England, and I hope the Scots will not adventure it; or if they do, I hope they will find, that although to our king they were his first-born subjects, yet to England belongs the birthright; but this should not be any cause to offer any injury to them, nor to suffer any from them.

16. There remains then no danger, by the blessing of God, but a civil war, from which God of his mercy defend us, as that which is most desperate of all others. The king's wisdom and justice must prevent it, if it may be; or if it should happen, "quod absit," he must quench that wildfire with all the diligence that possibly can be.

17. Competition to the crown there is none, nor can be, therefore it must be a fire within the bowels, or nothing; the cures whereof are these, "remedium prævenien s," which is the best physic, either to a natural body, or to a state, by just and equal government to take away the occasion; and "remedium puniens," if the other prevail not. The service and vigilancy of the deputy lieutenants in every county, and of the high sheriff, will contribute much herein to our security.

18. But if that should not prevail, by a wise and timous inquisition, the peccant humours and humorists must be discovered and purged, or cut off; mercy, in such a case, in a king, is true cruelty.

19. Yet if the heads of the tribes can be taken off, and the misled multitude will see their error, and return to their obedience, such an extent of mercy is both honourable and profitable.

20. A king, against a storm, must foresee to have a convenient stock of treasure; and neither be without money, which is the sinews of war, nor to depend upon the courtesy of others, which may fail at a pinch.

21. He must also have a magazine of all sorts, which must be had from foreign parts, or provided at home, and to commit them to several places, under the custody of trusty and faithful ministers and officers, if it be possible.

22. He must make choice of expert and able commanders to conduct and manage the war, either against a foreign invasion, or a home rebellion; which must not be young and giddy, which dare, not only to fight, but to swear, and drink, and curse, neither fit to govern others, nor able to govern themselves.

23. Let not such be discouraged, if they deserve well, by misinformation, or for the satisfying the humours or ambition of others, perhaps out of envy, perhaps out of treachery, or other sinister ends. A steady hand in governing of military affairs is more requisito than in times of peace, because an error committed in war, may, perhaps, prove irremediable.

24. If God shall bless these endeavours, and the king return to his own house in peace, when a civil war shall be at an end, those who have been found faithful in the land must be regarded, yea, and rewarded also; the traitorous, or treacherous, who have misled others, severely punished; and the neutrals and false-hearted friends and followers, who have started aside like a broken bow, be noted "carbone nigro." And so I shall leave them, and this part of the work.

VI. I come to the sixth part, which is trade; and that is either at home or abroad. And I begin with that which is at home, which enableth the subjects of the kingdom to live, and layeth a foundation to a foreign trade by traffic with others, which enableth them to live plentifully and happily.

1. For the home trade, I first commend unto your consideration the encouragement of tillage, which will enable the kingdom for corn for the natives, and to spare for exportation: and I myself have known, more than once, when, in times of dearth, in Queen Elizabeth's days, it drained much coin of the kingdom, to furnish us with corn from foreign parts.

2. Good husbands will find the means, by good husbandry, to improve their lands, by lime, chalk, marl, or sea-sand, where it can be had: but it will not be amiss, that they be put in mind thereof, and encouraged in their industries.

3. Planting of orchards, in a soil and air fit for them, is very profitable, as well as pleasurable; cider and perry are notable beverages in sea voyages.

4. Gardens are also very profitable, if planted with artichokes, roots, and such other things as are fit for food; whence they be called kitchen gardens, and that very properly.

5. The planting of hop-yards, sowing of woad and rape seed, are found very profitable for the planters, in places apt for them, and consequently profitable for the kingdom, which for divers years was furnished with them from beyond the seas.

6. The planting and preserving of woods, especially of timber, is not only profitable, but commendable, therewith to furnish posterity, both for building and shipping.

7. The kingdom would be much improved by draining of drowned lands, and gaining that in from the overflowing of salt waters and the sea, and from fresh waters also.

8. And many of those grounds would be exceeding fit for dairies, which, being well housewived, are exceeding commodious.

9. Much good land might be gained from forests and chases, more remote from the king's access, and from other commonable places, so as always there be a due care taken, that the poor commoners have no injury by such improvement.

10. The making of navigable rivers would be very profitable; they would be as so many indraughts of wealth, by conveying of commodities with ease from place to place.

11. The planting of hemp and flax would be an unknown advantage to the kingdom, many places therein being as apt for it, as any foreign parts.

12. But add thereunto, that if it be converted into linen-cloth or cordage, the commodity thereof will be multiplied.

13. So it is of the wools and leather of the kingdom, if they be converted into manufactures.

14. Our English dames are much given to the wearing of costly laces; and, if they be brought from Italy, or France, or Flanders, they are in great esteem; whereas, if the like laces were made by the English, so much thread as would make a yard of lace, being put into that manufacture, would be five times, or, perhaps, ten or twenty times the value.

15. The breeding of cattle is of much profit, especially the breed of horses, in many places, not only for travel, but for the great saddle; the English horse, for strength, and courage, and swiftness together, not being inferior to the horses of any other kingdom.

16. The minerals of the kingdom, of lead, iron, copper, and tin, especially, are of great value,

and set many able-bodied subjects on work; it were great pity they should not be industriously followed.

17. But of all minerals, there is none like to that of fishing, upon the coasts of these kingdoms, and the seas belonging to them: our neighbours, within half a day's sail of us, with a good wind, can show us the use and value thereof; and, doubtless, there is sea-room enough for both nations, without offending one another; and it would exceedingly support the navy.

18. This realm is much enriched, of late years, by the trade of merchandise which the English drive in foreign parts; and, if it be wisely managed, it must of necessity very much increase the wealth thereof: care being taken, that the exportation exceed in value the importation; for then the balance of trade must of necessity be returned in coin or bullion.

19. This would easily be effected, if the merchants were persuaded or compelled to make their returns in solid commodities, and not too much thereof in vanity, tending to excess.

20. But especially care must be taken, that monopolies, which are the cankers of all trading, be not admitted under specious colours of public good.

21. To put all these into a regulation, if a constant commission to men of honesty and understanding were granted, and well pursued, to give order for the managing of these things, both at home and abroad, to the best advantage; and that this commission were subordinate to the council board; it is conceived it would produce notable effects.

VII. The next thing is that of colonies and foreign plantations, which are very necessary, as outlets, to a populous nation, and may be profitable also if they be managed in a discreet way.

1. First, in the choice of the place, which requireth many circumstances; as, the situation, near the sea, for the commodiousness of an intercourse with England; the temper of the air and climate, as may best agree with the bodies of the English, rather inclining to cold than heat; that it be stored with woods, mines, and fruits, which are naturally in the place; that the soil be such as will probably be fruitful for corn, and other conveniences, and for breeding of cattle; that it hath rivers, both for passage between place and place, and for fishing also, if it may be; that the natives be not so many, but that there may be elbow-room enough for them, and for the adventives also: all which are likely to be found in the West Indies.

2. It should be also such as is not already planted by the subjects of any Christian prince or state, nor over-nearly neighbouring to their plantation. And it would be more convenient, to be chosen by some of those gentlemen or merchants which move first in the work, than to be designed unto them from the king; for it must proceed from the option of the people, else it sounds like an exile; so the colonies must be raised by the leave of the king, and not by his command.

3. After the place is made choice of, the first step must be, to make choice of a fit governor; who, although he have not the name, yet he must have the power of viceroy; and if the person who principally moved in the work be not fit for that trust, yet he must not be excluded from command; but then his defect in the governing part must be supplied by such assistants as shall be joined with him, or as he shall very well approve of.

4. As at their setting out they must have their commission or letters patents from the king, that so they may acknowledge their dependency upon the Crown of England, and under his protection; so they must receive some general instructions, how to dispose of themselves when they come there, which must be in nature of laws unto them.

5. But the general law, by which they must be guided and governed, must be the common law of England; and to that end, it will be fit that some man reasonably studied in the law, and otherwise qualified for such a purpose, be persuaded, if not thereunto inclined of himself, which were the best, to go thither as chancellor amongst them, at first; and when the plantation were more settled, then to have courts of justice there as in England.

6. At the first planting, or as soon after as they can, they must make themselves defensible both against the natives and against strangers; and to that purpose they must have the assistance of some able military man, and convenient arms and ammunition for their defence.

7. For the discipline of the church in those parts, it will be necessary, that it agree with that which is settled in England, else it will make a schism and a rent in Christ's coat, which must be seamless; and, to that purpose, it will be fit that, by the king's supreme power in causes ecclesiastical, within all his dominions, they be subordinate under some bishop and bishopric of this realm.

8. For the better defence against a common enemy, I think it would be best, that foreign plantations should be placed in one continent, and near together; whereas, if they be too remote, the one from the other, they will be disunited, and so the weaker.

9. They must provide themselves of houses, such as for the present they can, and, at more leisure, such as may be better; and they first must plant for corn and cattle, &c., for food and necessary sustenance; and after, they may enlarge themselves for those things which may be for profit and pleasure, and to traffic withal also.

10. Woods for shipping, in the first place, may doubtless be there had, and minerals there found,

perhaps, of the richest; howsoever, the mines out of the fruits of the earth, and seas and waters adjoining, may be found in abundance.

11. In a short time they may build vessels and ships also, for traffic with the parts near adjoining, and with England also, from whence they may be furnished with such things as they may want, and, in exchange or barter, send from thence other things, with which quickly, either by nature or art, they may abound.

12. But these things would by all means be prevented; that no known bankrupt, for shelter; nor known murderer or other wicked person, to avoid the law; nor known heretic or schismatic, be suffered to go into those countries; or, if they do creep in there, not to be harboured or continued: else, the place would receive them naught, and return them into England, upon all occasions, worse.

13. That no merchant, under colour of driving a trade thither or from thence, be suffered to work upon their necessities.

14. And that to regulate all these inconveniences, which will insensibly grow upon them, that the king be pleased to erect a subordinate council in England, whose care and charge shall be, to advise, and put in execution, all things which shall be found fit for the good of those new plantations; who, upon all occasions, shall give an account of their proceedings to the king, or to the council-board, and from them receive such directions as may best agree with the government of that place.

15. That the king's reasonable profit be not neglected, partly upon reservation of moderate rents and services; and partly upon customs; and partly upon importation and exportation of merchandise; which for a convenient time after the plantation begin, would be very easy, to encourage the work: but, after it is well settled, may be raised to a considerable proportion, worthy the acceptation.

[Yet these cautions are to be observed in these undertakings.

1. That no man be compelled to such an employment; for that were a banishment, and not a service fit for a free man.

2. That if any transplant themselves into plantations abroad, who are known schismatics, outlaws, or criminal persons, that they be sent for back upon the first notice; such persons are not fit to lay the foundation of a new colony.

3. To make no extirpation of the natives under pretence of planting religion: God surely will no way be pleased with such sacrifices.

4. That the people sent thither be governed according to the laws of this realm, whereof they are, and still must be subjects.

5. To establish there the same purity of religion, and the same discipline for church government, without any mixture of popery or anabaptism, lest they should be drawn into factions and schisms, and that place receive them there bad, and send them back worse.

6. To employ them in profitable trades and manufactures, such as the clime will best fit, and such as may be useful to this kingdom, and return to them an exchange of things necessary.

7. That they be furnished and instructed for the military part, as they may defend themselves; lest, on a sudden, they be exposed as a prey to some other nation, when they have fitted the colony for them.

8. To order a trade thither, and thence, in such a manner as some few merchants and tradesmen, under colour of furnishing the colony with necessaries, may not grind them, so as shall always keep them in poverty.

9. To place over them such governors as may be qualified in such manner as may govern the place, and lay the foundation of a new kingdom.

10. That care be taken, that when the industry of one man hath settled the work, a new man, by insinuation or misinformation, may not supplant him without just cause, which is the discouragement of all faithful endeavours.

11. That the king will appoint commissioners in the nature of a council, who may superintend the works of this nature, and regulate what concerns the colonies, and give an account thereof to the king, or to his council of state.

Again, For matter of trade, I confess it is out of my profession; yet in that I shall make a conjecture also, and propound some things to you, whereby, if I am not much mistaken, you may advance the good of your country and profit of your master.

1. Let the foundation of a profitable trade be thus laid, that the exportation of home commodities be more in value than the importation of foreign; so we shall be sure that the stocks of the kingdom shall yearly increase, for then the balance of trade must be returned in money or bullion.

2. In the importation of foreign commodities, let not the merchant return toys and vanities, as sometimes it was elsewhere apes and peacocks, but solid merchandise, first for necessity, next for pleasure, but not for luxury.

3. Let the vanity of the times be restrained, which the neighbourhood of other nations have induced; and we strive apace to exceed our pattern; let vanity in apparel, and, which is more vain, that of the fashion, be avoided. I have heard, that in Spain, a grave nation, whom in this I wish we might imitate, they do allow the players and courtesans the vanity of rich and costly clothes; but to sober men and matrons they permit it not upon pain of infamy; a severer punishment upon ingenuous natures than a pecuniary mulct.

4. The excess of diet in costly meats and drinks fetched from beyond the seas would be avoided; wise men will do it without a law, I would there

might be a law to restrain fools. The excess of wine costs the kingdom much, and returns nothing but surfeits and diseases; were we as wise as easily we might be, within a year or two at the most, if we would needs be drunk with wines, we might be drunk with half the cost.

5. If we must be vain and superfluous in laces and embroideries, which are more costly than either warm or comely, let the curiosity be the manufacture of the natives: then it should not be verified of us, "materiam superabat opus."

6. But instead of crying up all things, which are either brought from beyond sea, or wrought here by the hands of strangers, let us advance the native commodities of our own kingdom, and employ our countrymen before strangers: let us turn the wools of the land into clothes and stuffs of our own growth, and the hemp and flax growing here into linen cloth and cordage; it would set many thousand hands on work, and thereby one shilling worth of the materials would by industry be multiplied to five, ten, and many times to twenty times more in the value being wrought.

7. And of all sorts of thrift for the public good, I would above all others commend to your care the encouragement to be given to husbandry, and the improving of lands for tillage; there is no such usury as this. The king cannot enlarge the bounds of these islands, which make up his empire, the ocean being the unremoveable wall which encloseth them; but he may enlarge and multiply the revenue thereof by this honest and harmless way of good husbandry.

8. A very great help unto trade are navigable rivers; they are so many indraughts to attain wealth; wherefore by art and industry let them be made; but let them not be turned to private profit.

9. In the last place, I beseech you, take into your serious consideration that Indian wealth, which this island and the seas thereof excel in, the hidden and rich treasure of fishing. Do we want an example to follow? I may truly say to the English, "Go to the pismire, thou sluggard." I need not expound the text: half a day's sail with a good wind, will show the mineral and the miners.

10. To regulate all these it will be worthy the care of a subordinate council, to whom the ordering of these things may be committed, and they give an account thereof to the state.]

VIII. I come to the last of those things which I propounded, which is, the court and curiality.

The other did properly concern the king, in his royal capacity, as "pater patriæ;" this more properly as "pater familias:" and herein,

1. I shall, in a word, and but in a word only, put you in mind, that the king in his own person, both in respect of his household or court, and in respect of his whole kingdom, for a little kingdom is but as a great household, and a great household as a little kingdom, must be exemplary, "Regis ad exemplum, &c." But for this, God be praised, our charge is easy; for our gracious master, for his learning and piety, justice and bounty, may be, and is, not only a precedent to his own subjects, but to foreign princes also; yet he is still but a man, and seasonable "mementos" may be useful; and, being discreetly used, cannot but take well with him.

2. But your greatest care must be, that the great men of his court, for you must give me leave to be plain with you, for so is your injunction laid upon me, yourself in the first place, who are first in the eye of all men, give no just cause of scandal; either by light, or vain, or by oppressive carriage.

3. The great officers of the king's household had need be both discreet and provident persons, both for his honour and for his thrift; they must look both ways, else they are but half-sighted: yet, in the choice of them, there is more latitude left to affection, than in the choice of counsellors, and of the great officers of state, before touched, which must always be made choice of merely out of judgment; for in them the public hath a great interest.

[And yet in these, the choice had need be of honest and faithful servants, as well as of comely outsides, who can bow the knee, and kiss the hand, and perform other services, of small importance compared with this of public employment. King David, Psalm ci. 6, 7, propounded a rule to himself for the choice of his courtiers. He was a wise and a good king; and a wise and a good king shall do well to follow such a good example; and if he find any to be faulty, which perhaps cannot suddenly be discovered, let him take on him this resolution as King David did, "There shall no deceitful person dwell in my house." But for such as shall bear office in the king's house, and manage the expenses thereof, it is much more requisite to make a good choice of such servants, both for his thrift and for his honour.]

4. For the other ministerial officers in court, as, for distinction sake, they may be termed, there must also be an eye unto them and upon them. They have usually risen in the household by degrees, and it is a noble way, to encourage faithful service: but the king must not bind himself to a necessity herein, for then it will be held "ex debito:" neither must he alter it, without an apparent cause for it: but to displace any who are in, upon displeasure, which for the most part happeneth upon the information of some great man, is by all means to be avoided, unless there be a manifest cause for it.

5. In these things you may sometimes interpose, to do just and good offices; but for the general, I should rather advise, meddle little, but

leave the ordering of those household affairs to the whitestaffs, which are those honourable persons, to whom it properly belongeth to be answerable to the king for it; and to those other officers of the green-cloth, who are subordinate to them, as a kind of council, and a court of justice also.

6. Yet, for the green-cloth law, take it in the largest sense, I have no opinion of it, farther than it is regulated by the just rules of the common laws of England.

7. Towards the support of his majesty's own table, and of the prince's, and of his necessary officers, his majesty hath a good help by purveyance, which justly is due unto him; and, if justly used, is no great burden to the subject; but by the purveyors and other under officers is many times abused. In many parts of the kingdom, I think, it is already reduced to a certainty in money; and if it be indifferently and discreetly managed, it would be no hard matter to settle it so throughout the whole kingdom; yet to be renewed from time to time: for that will be the best and safest, both for the king and people.

8. The king must be put in mind to preserve the revenues of his crown, both certain and casual, without diminution, and to lay up treasure in store against a time of extremity; empty coffers give an ill sound, and make the people many times forget their duty, thinking that the king must be beholden to them for his supplies.

9. I shall by no means think it fit, that he reward any of his servants with the benefit of forfeitures, either by fines in the court of Star Chamber, or high commission courts, or other courts of justice, or that they should be farmed out, or bestowed upon any, so much as by promise, before judgment given; it would neither be profitable nor honourable.

10. Besides matters of serious consideration, in the courts of princes, there must be times for pastimes and disports: when there is a queen and ladies of honour attending her, there must sometimes be masques, and revels, and interludes; and when there is no queen, or princess, as now; yet at festivals, and for entertainment of strangers, or upon such occasions, they may be fit also: yet care would be taken, that in such cases they be set off more with wit and activity than with costly and wasteful expenses.

11. But for the king and prince, and the lords and chivalry of the court, I rather commend, in their turns and seasons, the riding of the great horse, the tilts, the barriers, tennis, and hunting, which are more for the health and strength of those who exercise them, than in an effeminate way to please themselves and others.

And now the prince groweth up fast to be a man, and is of a sweet and excellent disposition; it would be an irreparable stain and dishonour upon you, having that access unto him, if you should mislead him, or suffer him to be misled by any loose or flattering parasites; the whole kingdom hath a deep interest in his virtuous education; and if you, keeping that distance which is fit, do humbly interpose yourself, in such a case he will one day give you thanks for it.

12. Yet dice and cards may sometimes be used for recreation, when field-sports cannot be had; but not to use it as a mean to spend the time, much less to misspend the thrift of the gamesters.

Sir, I shall trouble you no longer; I have run over these things as I first propounded them; please you to make use of them, or any of them, as you shall see occasion; or to lay them by, as you shall think best, and to add to them, as you daily may, out of your experience.

I must be bold, again, to put you in mind of your present condition; you are in the quality of a sentinel; if you sleep, or neglect your charge, you are an undone man, and you may fall much faster than you have risen.

I have but one thing more to mind you of, which nearly concerns yourself; you serve a great and gracious master, and there is a most hopeful young prince, whom you must not desert; it behooves you to carry yourself wisely and evenly between them both: adore not so the rising son, that you forget the father, who raised you to this height; nor be you so obsequious to the father, that you give just cause to the son to suspect that you neglect him; but carry yourself with that judgment, as, if it be possible, may please and content them both; which, truly, I believe, will be no hard matter for you to do: so may you live long beloved of both.

[If you find in these or any other your observations, which doubtless are much better than these loose collections, any thing which you would have either the father or the son to take to heart, an admonition from a dead author, or a caveat from an impartial pen, whose aim neither was nor can be taken to be at any particular by design, will prevail more and take better impression than a downright advice; which perhaps may be mistaken as if it were spoken magisterially.

Thus may you live long a happy instrument for your king and country; you shall not be a meteor or a blazing star, but "stella fixa:" happy here and more happy hereafter, "Deus manu sua te ducat:"] which is the hearty prayer of

Your most obliged and devoted servant.

THE CHARGE

OF SIR FRANCIS BACON, KNIGHT,

THE KING'S ATTORNEY GENERAL,

AGAINST WILLIAM TALBOT,

A COUNSELLOR AT LAW OF IRELAND,

UPON AN INFORMATION IN THE STAR-CHAMBER "ORE TENUS," FOR A WRITING UNDER HIS HAND, WHEREBY THE SAID WILLIAM TALBOT BEING DEMANDED, WHETHER THE DOCTRINE OF SUAREZ, TOUCHING DEPOSING AND KILLING OF KINGS EXCOMMUNICATED, WERE TRUE OR NOT HE ANSWERED, THAT HE REFERRED HIMSELF UNTO THAT WHICH THE CATHOLIC ROMAN CHURCH SHOULD DETERMINE THEREOF.

ULTIMO DIE TERMINI HILARII, UNDECIMO JACOBI REGIS.

My Lords,

I brought before you the first sitting of this term the cause of duels; but now this last sitting I shall bring before you a cause concerning the greatest duel which is in the Christian world, the duel and conflict between the lawful authority of sovereign kings, which is God's ordinance for the comfort of human society, and the swelling pride and usurpation of the see of Rome "in temporalibus," tending altogether to anarchy and confusion. Wherein if this pretence in the Pope of Rome, by cartels to make sovereign princes as the banditti, and to proscribe their lives, and to expose their kingdoms to prey; if these pretences, I say, and all persons that submit themselves to that part of the Pope's power in the least degree, be not by all possible severity repressed and punished, the state of Christian kings will be no other than the ancient torment described by the poets in the hell of the heathen; a man sitting richly robed, solemnly attended, delicious fare, &c., with a sword hanging over his head, hanging by a small thread, ready every moment to be cut down by an accursing and accursed hand. Surely I had thought they had been the prerogatives of God alone, and of his secret judgments: "Solvam cingula regum," I will loosen the girdles of kings; or again, "He pourseth contempt upon princes;" or, "I will give a king in my wrath, and take him away again in my displeasure;" and the like: but if these be the claims of a mortal man, certainly they are but the mysteries of that person which "exalts himself above all that is called God, supra omne quod dicitur Deus." Note it well, not above God, though that in a sense be true, but above all that is called God; that is, lawful kings and magistrates.

But, my lords, in this duel I find this Talbot, that is now before you, but a coward; for he hath given ground, he hath gone backward and forward; but in such a fashion, and with such interchange of repenting and relapsing, as I cannot tell whether it doth extenuate or aggravate his offence. If he shall more publicly in the face of the court fall and settle upon a right mind, I shall be glad of it; and he that would be against the king's mercy, I would he might need the king's mercy: but, nevertheless, the court will proceed by rules of justice.

The offence, therefore, wherewith I charge this Talbot, prisoner at the bar, is this in brief and in effect: That he hath maintained, and maintaineth under his hand, a power in the pope for deposing and murdering of kings. In what sort he doth this, when I come to the proper and particular charge, I will deliver it in his own words, without pressing or straining.

But before I come to the particular charge of this man, I cannot proceed so coldly; but I must express unto your lordships the extreme and imminent danger wherein our dear and dread sovereign is, and in him we all; nay, all princes of both religions, for it is a common cause, do stand at this day, by the spreading and enforcing of this furious and pernicious opinion of the pope's temporal power: which, though the modest sort would blanch with the distinction of "in ordine ad spiritualia," yet that is but an elusion; for he that maketh the distinction, will also make the case. This peril, though it be in itself notorious, yet, because there is a kind of dulness, and almost a lethargy in this age, give me leave to set before you two glasses, such as certainly the like never met in one age; the glass of France, and the glass of England. In that of France the trage-

dies acted and executed in two immediate kings; in the glass of England, the same, or more horrible, attempted likewise in a queen and king immediate, but ending in a happy deliverance. In France, Henry III., in the face of his army, before the walls of Paris, stabbed by a wretched Jacobine friar. Henry IV., a prince that the French do surname the Great, one that had been a saviour and redeemer of his country from infinite calamities, and a restorer of that monarchy to the ancient state and splendour, and prince almost heroical, except it be in the point of revolt from religion, at a time when he was as it were to mount on horseback for the commanding of the greatest forces that of long time had been levied in France, this king likewise stilettoed by a rascal votary, which had been enchanted and conjured for the purpose.

In England, Queen Elizabeth, of blessed memory, a queen comparable and to be ranked with the greatest kings, oftentimes attempted by like votaries, Sommervile, Parry, Savage, and others, but still protected by the watchman that slumbereth not. Again, our excellent sovereign, King James, the sweetness and clemency of whose nature were enough to quench and mortify all malignity, and a king shielded and supported by posterity; yet this king in the chair of Majesty, his vine and olive branches about him, attended by his nobles and third estate in parliament; ready, in the twinkling of an eye, as if it had been a particular doomsday, to have been brought to ashes, dispersed to the four winds. I noted the last day, my lord chief justice, when he spake of this powder treason, he laboured for words, though they came from him with great efficacy, yet he truly confessed, and so must all men, that that treason is above the charge and report of any words whatsoever.

Now, my lords, I cannot let pass, but in these glasses which I spake of, besides the facts themselves and danger, to show you two things; the one, the ways of God Almighty, which turneth the sword of Rome upon the kings that are the vassals of Rome, and over them gives it power; but protecteth those kings which have not accepted the yoke of his tyranny, from the effects of his malice; the other, that, as I said at first, this is a common cause of princes: it involveth kings of both religions; and therefore his majesty did most worthily and prudently ring out the alarm-bell, to awake all other princes to think of it seriously, and in time. But this is a miserable case the while, that these Roman soldiers do either thrust the spear into the sides of God's anointed, or at least they crown them with thorns; that is, piercing and pricking cares and fears, that they can never be quiet or secure of their lives or states. And as this peril is common to princes of both religions, so princes of both religions have been likewise equally sensible of every injury that touched their temporals.

Thuanus reports in his story, that when the realm of France was interdicted by the violent proceedings of Pope Julius the Second, the king, otherwise noted for a moderate prince, caused coins of gold to be stamped with his own image, and this superscription, "Perdam nomen Babylonis e terra." Of which Thuanus saith, himself had seen divers pieces thereof. So as this Catholic king was so much incensed at that time, in respect of the pope's usurpation, as he did apply Babylon to Rome. Charles the Fifth, emperor, who was accounted one of the pope's best sons, yet proceeded in matter temporal towards Pope Clement with strange rigour: never regarding the pontificality, but kept him prisoner thirteen months in a pestilent prison; and was hardly dissuaded by his council from having sent him captive into Spain; and made sport with the threats of Frosberg the German, who wore a silk rope under his cassock, which he would show in all companies; telling them that he carried it to strangle the pope with his own hands. As for Philip the Fair, it is the ordinary example, how he brought Pope Boniface the Eighth to an ignominious end, dying mad and enraged; and how he styled his rescript to the pope's bull, whereby he challenged his temporals, "Sciat fatuitas vestra," not your beatitude, but your stultitude; a style worthy to be continued in the like cases; for certainly that claim is mere folly and fury. As for native examples, here it is too long a field to enter into them. Never kings of any nation kept the partition-wall between temporal and spiritual better in times of greatest superstition: I report me to King Edward I., that set up so many crosses, and yet crossed that part of the pope's jurisdiction, no man more strongly. But these things have passed better pens and speeches: here I end them.

But now to come to the particular charge of this man, I must inform your lordships the occasion and nature of this offence: There hath been published lately to the world a work of Suarez, a Portuguese, a professor in the university of Coimbra, a confident and daring writer, such a one as Tully describes in derision; "nihil tam verens, quam ne dubitare aliqua de re videretur:" one that fears nothing but this, lest he should seem to doubt of any thing. A fellow that thinks with his magistrality and goosequill to give laws and menages to crowns and sceptres. In this man's writing this doctrine of deposing or murdering kings, seems to come to a higher elevation than heretofore; and it is more arted and positived than in others. For in the passages which your lordships shall hear read anon, I find three assertions which run not in the vulgar track, but are such as wherewith men's ears, as I suppose, are not much acquainted; whereof the first is,

That the pope hath a superiority over kings, as subjects, to depose them; not only for spiritual crimes, as heresy and schism, but for faults of a temporal nature; forasmuch as a tyrannical government tendeth ever to the destruction of souls. So, by this position, kings of either religion are alike comprehended, and none exempted. The second, that after a sentence given by the pope, this writer hath defined of a series, or succession, or substitution of hangmen, or "bourreaux," to be sure, lest an executioner should fail. For he saith, That when a king is sentenced by the pope to deprivation or death, the executioner, who is first in place, is he to whom the pope shall commit the authority, which may be a foreign prince, it may be a particular subject, it may be general, to the first undertaker. But if there be no direction or assignation in the sentence special or general, then, "de jure," it appertains to the next successor, a natural and pious opinion; for commonly they are sons, or brothers, or near of kin, all is one; so as the successor be apparent; and also that he be a Catholic. But, if he be doubtful, or that he be no Catholic, then it devolves to the commonalty of the kingdom; so as he will be sure to have it done by one minister or other. The third is, he distinguisheth of two kinds of tyrants, a tyrant in title, and a tyrant in regiment; the tyrant in regiment cannot be resisted or killed without a sentence precedent by the pope; but a tyrant in title may be killed by any private man whatsoever. By which doctrine he hath put the judgment of kings' titles, which I will undertake, are never so clean, but that some vain quarrel or exception may be made unto them, upon the fancy of every private man; and also couples the judgment and execution together, that he may judge him by a blow, without any other sentence.

Your lordships see what monstrous opinions these are, and how both these beasts, the beast with seven heads, and the beast with many heads, pope and people, are at once let in, and set upon the sacred persons of kings.

Now, to go on with the narrative; there was an extract made of certain sentences and portions of this book, being of this nature that I have set forth, by a great prelate and counsellor, upon a just occasion; and there being some hollowness and hesitation in these matters, wherein it is a thing impious to doubt, discovered and perceived in Talbot; he was asked his opinion concerning these assertions, in the presence of the best; and afterwards they were delivered to him, that upon advice, and "sedato animo," he might declare himself. Whereupon, under his hand, he subscribes thus:

May it please your honourable good lordships: Concerning this doctrine of Suarez, I do perceive, by what I have read in this book, that the same doth concern matter of faith, the controversy growing upon exposition of Scriptures and councils, wherein, being ignorant and not studied, I cannot take upon me to judge; but I do submit my opinion therein to the judgment of the Catholic Roman church, as in all other points concerning faith I do. And for matter concerning my loyalty, I do acknowledge my sovereign liege lord, King James, to be lawful and undoubted king of all the kingdoms of England, Scotland, and Ireland; and I will bear true faith and allegiance to his highness during my life. WILLIAM TALBOT.

My lords, upon these words I conceive Talbot hath committed a great offence, and such a one, as, if he had entered into a voluntary and malicious publication of the like writing, it would have been too great an offence for the capacity of this court. But because it grew by a question asked by a council of estate, and so rather seemeth, in a favourable construction, to proceed from a kind of submission to answer, than from any malicious or insolent will; it was fit, according to the clemency of these times, to proceed in this manner before your lordships: and, yet, let the hearers take these things right; for, certainly, if a man be required by the council to deliver his opinion whether King James be king or no? and he deliver his opinion that he is not, this is high treason: but, I do not say that these words amount to that; and, therefore, let me open them truly to your lordships, and therein open also the understanding of the offender himself, how far they reach.

My lords, a man's allegiance must be independent and certain, and not dependent and conditional. Elizabeth Barton, that was called the holy maid of Kent, affirmed, that if King Henry VIII. did not take Catharine of Spain again to his wife within a twelvemonth, he should be no king: and this was treason. For though this act be contingent and future, yet the preparing of the treason is present.

And, in like manner, if a man should voluntarily publish or maintain, that whensoever a bull of deprivation shall come forth against the king, that from thenceforth he is no longer king; this is of like nature. But with this I do not charge you neither; but this is the true latitude of your words, That if the doctrine touching the killing of kings be matter of faith, then you submit yourself to the judgment of the Catholic Roman church: so as now, to do you right, your allegiance doth not depend simply upon a sentence of the pope's deprivation against the king; but upon another point also, if these doctrines be already, or shall be declared to be matter of faith. But, my lords, there is little won in this: there may be some difference to the guilt of the party, but there is little to the danger of the king. For the same Pope of Rome may, with the same breath, declare both. So as still, upon

the matter, the king is made but tenant at will of his life and kingdom; and the allegiance of his subjects is pinned upon the pope's acts. And, certainly, it is time to stop the current of this opinion of acknowledgment of the pope's power "in temporalibus;" or else it will sap and supplant the seat of kings. And let it not be mistaken, that Mr. Talbot's offence should be no more than the refusing the oath of allegiance. For it is one thing to be silent, and another thing to affirm. As for the point of matter of faith, or not of faith, to tell your lordships plain, it would astonish a man to see the gulf of this implied belief. Is nothing excepted from it? If a man should ask Mr. Talbot, Whether he do condemn murder, or adultery, or rape, or the doctrine of Mahomet, or of Arius, instead of Suarez? Must the answer be with this exception, that if the question concern matter of faith, as no question it doth, for the moral law is matter of faith. that therein he will submit himself to what the church shall determine? And, no doubt, the murder of princes is more than simple murder. But, to conclude, Talbot, I will do you this right, and I will not be reserved in this, but to declare that that is true; that you came afterwards to a better mind; wherein if you had been constant, the king, out of his great goodness, was resolved not to have proceeded with you in course of justice; but then again you started aside like a broken bow. So that by your variety and vacillation you lost the acceptable time of the first grace, which was not to have convented you.

Nay, I will go farther with you: your last submission I conceive to be satisfactory and complete; but then it was too late; the king's honour was upon it; it was published and a day appointed for hearing; yet what preparation that may be to the second grace of pardon, that I know not: but I know my lords, out of their accustomed favour, will admit you not only to your defence concerning that that hath been charged; but to extenuate your fault by any submission that now God shall put into your mind to make.

EDITOR'S PREFACE

TO

I. Theological Tracts.
1. Prayers.
I. A Prayer, or Psalm, made by the Lord Bacon, Chancellor of England.
2. A Prayer made by the Lord Chancellor Bacon.
3. The Student's Prayer.
4. The Writer's Prayer.
2. A Confession of Faith.
3. The Characters of a Believing Christian, in Paradoxes and seeming Contradictions.
4. An Advertisement touching the Controversies of the Church of England.
5. Certain Considerations, touching the better Pacification and Edification of the Church of England.
6. The Translation of certain Psalms into English Verse.
7. An Advertisement touching a Holy War.
8. Questions about the Lawfulness of a War for the Propagating of Religion.

II. Miscellaneous.
1. Mr. Bacon's Discourse in praise of his Sovereign.
2. A Proclamation drawn for his Majesty's first coming in.
3. A Draught of a Proclamation touching his Majesty's style.
4. Physiological Remains.
5. Medical Remains.

III. Judicial Charges and Tracts.
1. Speeches.
1. On taking his place in Chancery.
2. Before the Summer Circuits.
3. To Sir W. Jones.
4. To Sir J. Denham.
5. To Justice Hutton.
2. Ordinances for regulating the Court of Chancery.
3. Papers relating to Sir Edw. Coke.
4. Charge against Whitelocke.
5. Letters relating to Legal Proceedings.
6. Innovations introduced into the Laws and Government.

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§ 1.

THEOLOGICAL TRACTS.

Archbishop Tenison's *Baconiana* contains the following passage: "Last of all, for his lordship's writings upon pious subjects, though for the nature of the argument, they deserve the first place, yet they being but few, and there appearing nothing so extraordinary in the composure of them, as is found in his lordship's other labours, they have not obtained an earlier mention. They are only these: "His Confession of Faith, written by himself in English, and turned into Latin by Dr. Rawley,[1] the questions about a Holy War, and the Prayers in these Remains,[2] and a translation of certain of David's Psalms into English verse. With this last pious exercise he diverted himself in the time of his sickness, in the year twenty-five. When he sent it abroad into the world, he made a dedication of it to his good friend, Mr. George Herbert, for he judged the argument to be suitable to him, in his double quality of a divine and a poet."

In the life of Lord Bacon, by Dr. Rawley, "his lordship's first and last chaplain," as he always proudly entitles himself, there is the following passage: "This lord was religious; for though the world be apt to suspect and prejudge great wits and politics to have somewhat of the atheist, yet he was conversant with God, as appeareth by several passages throughout the whole current of his writings; otherwise he should have crossed his own principles, which were, 'that a little philosophy maketh men apt to forget God, as attributing too much to second causes; but depth of philosophy bringeth men back to God again.' Now I am sure there is no man will deny him, or account otherwise of him, but to have him been a deep philosopher. And not only so, but he was able to render a reason of the hope which was in him, which that writing of his, of the confession of the faith, doth abundantly testify. He repaired frequently, when his health would permit him, to the service of the church, to hear sermons; to the administration of the sacrament of the blessed body and blood of Christ; and died in the true faith established in the Church of England."

The passage to which Dr. Rawley alludes, is in the "Advancement of Learning," where he says,

[1] 1658, in the Opuscula.

[2] Baconiana, 79

"It is an assured truth, and a conclusion of experience, that a little or superficial knowledge of philosophy may incline the mind of man to atheism, but a farther proceeding therein doth bring the mind back again to religion, for in the entrance of philosophy, when the second causes, which are next unto the senses, do offer themselves to the mind of man, if it dwell and stay there, it may induce some oblivion of the highest cause; but when a man passeth on farther, and seeth the dependence of causes, and the works of Providence, then, according to the allegory of the poets, he will easily believe that the highest link of nature's chain must needs be tied to the foot of Jupiter's chair. To conclude, therefore, let no man, upon a weak conceit of sobriety, or an ill-applied moderation, think or maintain, that a man can search too far, or be too well studied in the book of God's word, or the book of God's works—divinity or philosophy." The same sentiment, and almost the same words, may be found in his "Meditations on Atheism," in the "Meditationes Sacræ," and in his "Essay on Atheism" in his Essays.[1]

The several passages throughout the current of his writings, in which it appears that Lord Bacon was conversant with God, it would not, I fear, be proper for me in this place to do more than enumerate. They may be found in two volumes, entitled, "Le Christianisme de François Bacon,"[2] and there is scarcely a work of Lord Bacon's, in which his religious sentiments may not be discovered. Amongst his minor productions, they may be seen; in the "Meditationes Sacræ;" in the "Wisdom of the Ancients;" in the Fables of Pan, of Prometheus, of Pentheus, and of Cupid: in various parts of the Essays, but particularly in the Essay on Atheism and Goodness of Nature, in the "New Atlantis," an imaginary college amongst a Christian people, full of piety and humanity, whose prayer is—"Lord God of heaven and earth, thou hast vouchsafed of thy grace, to those of our order, to know thy work of creation, and the secrets of them; and to discern, as far as appertaineth to the generations of men, between divine miracles, works of nature, works of art, and impostures and illusions of all sorts. I do here acknowledge and testify before this people, that the thing which we now see before our eyes, is thy finger, and a true miracle; and forasmuch as we learn in our books, that thou never workest miracles, but to a divine and excellent end, for the laws of nature are thine own laws, and thou exceedest them not but upon great cause, we most humbly beseech thee to prosper this great sign, and to give us the interpretation and use of it in mercy; which thou dost in some part secretly promise by sending it unto us;" and the conditions of entities[3] in the *Baconiana*, thus concludes: "*This is the Form and Rule of our Alphabet.* May God, the Creator, Preserver, and Renewer of the Universe, protect and govern this work, both in its *ascent* to his glory, and in its *descent* to the good of mankind, for the sake of his mercy and good will to men though his only Son [Immanuel] *God-with-us.*"

These sentiments are not confined to the minor productions of Lord Bacon, but pervade all his works. They may be seen in his tract,—"De principiis atque originibus secundum fabulas Cupidinis et Cœli: sive Parmenidis et Telesii, et præcipue Democriti philosophia, tractata in fabula." The introduction to his "Historia Naturalis et Experimentalis, Quæ est *Instaurationis magnæ* pars tertia," concludes thus: "Deus Universi Conditor, conservator. Instaurator, hoc opus, et in ascensione ad Gloriam suam, et in descensione ad bonum humanum, pro suâ erga Homines, Benevolentiâ, et Misericordiâ, protegat et regat, per Filium suum unicum, Nobiscum Deum."[4] And in the conclusion of the preface to the Instauration he says, "Neque enim hoc siverit Deus, ut phantasiæ nostræ somnium pro exemplari mundi edamus: sed potius benigne faveat, ut apocalypsim, ac veram visionem vestigiorum et sigillorum Creatoris supercreaturas, scribamus. Itaque tu, Pater, qui lucem visibilem primitias creaturæ dedisti, et lucem intellectualem ad fastigium operum tuorum in faciem hominis inspirasti; opus hoc, quod a tua bonitate profectum, tuam gloriam repetit, tuere et rege. Tu, postquam conversus es ad spectandum opera, quæ fecerunt manus tuæ, vidisti quod omnia essent bona valde; et requievisti. At homo, conversus ad opera, quæ fecerunt manus suæ, vidit quod omnia essent vanitas et vexatio spiritus; nec ullo modo requievit. Quare si in operibus tuis sudabimus, facies nos visionis tuæ et sabbati tui participes. Supplices petimus, ut hæc mens nobis constet: utque novis eleemosynis per manus nostras et aliorum, quibus eandem mentem largieris, familiam humanam dotatam velis."[5]

[1] The following similar sentiment is in the general corollary to Hume's Essays: "Though the stupidity of men, barbarous and uninstructed, be so great, that they may not see a sovereign Author in the more obvious works of nature, to which they are so much familiarized; yet it scarce seems possible, that any one of good understanding should reject that idea, when once it is suggested to him. A purpose, an intention, a design is evident in every thing; and when our comprehension is so far enlarged as to contemplate the first rise of this visible system, we must adopt, with the strongest conviction, the idea of some intelligent cause or Author."

[2] Published at Paris, An. VII.

[3] Baconiana, 91.

[4] May God the Creator, Preserver, and Restorer of the universe, out of his kindness and compassion towards mankind protect and govern this work, both when ascending towards his glory, and descending to the improvement of man, through his only son, *God with us.*

[5] May thou, therefore, O Father, who gavest the light of vision as the first-fruits of the creation, and hast inspired the

The Treatise "De Augmentis Scientiarum," abounds with religious sentiments, and contains two tracts, one upon natural,[1] the other upon inspired divinity, "the Sabbath and port of all men's labours."[2] In the *Novum Organum*, under the head of Instances of Divorce,[3] there is the following observation: "Atque in radiis opticis, et sonis, et calore, et aliis nonnullis operantibus ad distans, probabile est media corpora disponi et alterari: eò magis, quòd requiratur medium qualificatum ad deferendum operationem talem. At magnetica illa sive Coitua virtus admittit media tanquam adiaphora, nec impeditur virtus in omnigeno medio. Quod si nil rei habeat virtus illa aut actio cum corpore medio, sequitur quod sit virtus aut actio naturalis ad tempus nonnullum, et in loco nonnullo, subsistens sine corpore: cum neque subsistat in corporibus terminantibus, nec in mediis. Quare actio magnetica poterit esse instantia diuortii circa naturam corpoream, et actionem naturalem. Cui hoc adjici potest tanquam corollarium aut lucrum non prætermittendum: viz. quòd etiam secundùm sensum philosophanti sumi possit probatio, quòd sint entia et substantiæ separatæ et incorporeæ. Si enim virtus et actio naturalis, emanans à corpore, subsistere possit aliquo tempore, et aliquo loco, omninò sine corpore; propè est ut possit etiam emanare in origine suâ à substantiâ incorporeâ. Videtur enim non minus requiri natura corporea ad actionem naturalem sustentandam et deuehendam, quam ad excitandam aut generandam."[4]

Such are specimens of Lord Bacon's religious sentiments, which may be found in different parts of his works; but they are not confined to his intended publications. In a letter to Mr. Mathew, imprisoned for religion, he says, "I pray God, that understandeth us all better than we understand one another, contain you, even as I hope he will, at the least, within the bounds of loyalty to his majesty, and natural piety towards your country. And I entreat you much, sometimes to meditate upon the extreme effects of superstition in this last powder treason: fit to be tabled and pictured in the chambers of meditation, as another hell above the ground: and well justifying the censure of the heathen, that superstition is far worse than atheism; by how much it is less evil to have no opinion of God at all, than such as is impious towards his divine majesty and goodness. Good Mr. Mathew, receive yourself back from these courses of perdition. Willing to have written a great deal more, I continue," etc. In the decline of his life, in his letter[5] to the Bishop of Winchester, he says, "Amongst consolations, it is not the least to represent to a man's self like examples of calamity in others. For examples give a quicker impression than arguments; and, besides, they certify us, that which the Scripture also tendereth for satisfaction; "that no new thing is happened unto us." "In this kind of consolation I have not been wanting to myself, though, as a Christian, I have tasted, through God's great goodness, of higher remedies;" and his last will thus begins: "First, I bequeath my soul and body into the hands of God, by the blessed oblation of my Saviour; the one at the time of my dissolution, the other at the time of my resurrection. For my burial, I desire it may be in St. Michael's church, near St. Alban's: there was my mother buried, and it is the parish church of my mansion-house of Gorhambury, and it is the only Christian church within the walls of Old Verulam."

countenance of man with the light of the understanding as the completion of thy works, guard and direct this work, which proceeding from thy bounty, seeks in return thy glory. When thou turnedst to look upon the works of thy hands, thou sawest that all were very good and didst rest. But man, when he turned towards the works of his hands, saw that they were all vanity and vexation of spirit, and had no rest. Wherefore, if we labour in thy works, thou wilt make us partakers of that which thou beholdest, and of thy sabbath. We humbly pray that our present disposition may continue firm, and that thou mayest be willing to endow thy family of mankind with new gifts, through our hands, and the hands of those to whom thou wilt accord the same disposition.

[1] Book 3, c. 2, of the Treatise De Augmentis, and in the Advancement of Learning, page 174.

[2] Book ix. 6, of the Treatise De Augmentis.

[3] Instance, 37.

[4] Of the conclusion of this passage I subjoin two translations, the one by Dr. Shaw, the other by my excellent friend, to whom I am indebted for the translation of the *Novum Organum*.

SHAW'S TRANSLATION.

To this may be added, by way of corollary, the following considerable discovery, viz. that by philosophizing, even according to sense, a proof may be had of the existence of separated and incorporeal beings and substances; for if natural virtues and actions flowing from a body may subsist without a body for some time in space or place, it is possible that such virtues or actions may proceed originally from an incorporeal substance: for a corporeal nature seems no less required to support and convey, than to excite and generate a natural action.

NEW TRANSLATION.

To which we may add as a corollary and an advantage not to be neglected, that it may be taken as a proof of essence and substance being separate and incorporeal, even by those who philosophize according to the senses. For if natural power and action emanating from a body can exist at any time and place entirely without any body, it is nearly a proof that it can also emanate originally from an incorporeal substance. For a corporeal nature appears to be no less necessary for supporting and conveying than for exciting or generating natural action.

[5] This letter was published in Letters and Remains by Stephens, 1734, with the following note: "The following letter to the most learned Dr. Andrews, Bishop of Winchester, was written by my Lord St. Alban, in the year 1622, and in the nature of a dedication, prefixed before his dialogue, touching a Holy War; which was not printed, at least correctly, till seven years after, by the care of Dr. Rawley. But because it has been found amongst his lordship's letters and other books, separated from that treatise, and chiefly, because it gives some account of his writings, and behaviour after his retirement, I thought it very proper to insert it in this place."

PRAYERS.[1]

Of the prayers contained in this volume, the first,[2] entitled, "A Prayer, or Psalm, made by the Lord Chancellor of England," is in the Resuscitatio. The second prayer, entitled, "A Prayer made and used by the Lord Chancellor Bacon," is in the Remains; and the two remaining prayers, "The Student's Prayer," and "The Writer's Prayer," are in the *Baconiana*.

THE CONFESSION OF FAITH.

Of the authenticity of this Essay no doubt can be entertained; it was published in a separate tract in 1641,[3] and by Dr. Rawley in the *Resuscitatio*,[4] by whom it was translated into Latin, and published in the *Opuscula*.[5] In the *Resuscitatio*, Dr. Rawley, in his address to the reader, says, "For that treatise of his lordship's, incribed, A Confession of the Faith, I have ranked that, in the close of this whole volume: thereby to demonstrate to the world that he was a master in divinity, as well as in philosophy or politics; and that he was versed no less in the saving knowledge, than in the universal and adorning knowledges: for though he composed the same many years before his death, yet I thought that to be the fittest place, as the most acceptable incense unto God of the faith wherein he resigned his breath; the crowning of all his other perfections and abilities; and the best perfume of his name to the world after his death." In his Life he says, "He was able to render a reason of the hope which was in him; which that writing of his of the Confession of the Faith doth abundantly testify;" and in the address to the reader, in the *Opuscula*, he says, "Supererat tandem scriptum illud Confessionis Fidei; quod auctor ipse, plurimis ante obitum annis, idiomate Anglicano concepit: operæ pretium mihi visum est Romana civitate donare; quo non minus exteris, quam popularibus suis, palam fiat, qua fide imbutus, et quibus mediis fretus, illustrissimus heros, animam Deo reddiderit; et quod theologicis studiis, æque ac philosophicis et civilibus, cum commodum esset, vacaverit. Fruere his operibus, et scientiarum antistitis olim Verulamii ne obliviscaris. Vale."

This tract is thus noticed by Archbishop Tenison in the "Baconiana."[6] "His Confession of Faith," written by him in English, and turned into Latin by Dr. Rawley; upon which there was some correspondence between Dr. Maynwaring and Dr. Rawley,[7] as the archbishop, in describing

[1] In Sloane's MSS. 23, there is a MS. prayer.

[2] Although the first part of the Resuscitatio was published by Dr. Rawley, and the second part (which contains this prayer) was published in his name, and during his life, it contains matter of which Lord Bacon was not the author. Archbishop Tenison, in his Baconiana, p. 59, speaking of the apophthegms, says, "Besides, his lordship hath received much injury by late editions, of which some have much enlarged, but not all enriched the collection, stuffing it with tales and sayings, too infacetious for a ploughman's chimney-corner." And, in a note, he adds, "Even by that added (but not by Dr. Rawley) to the Resuscitation, Ed. III." I mention this fact, not as intending to infer that this prayer was not "made by Lord Bacon," but that the evidence may be duly weighed. B. M.

In the Tatler, No. 267, it is, upon what authority I know not, thus mentioned: "I have hinted in some former papers, that the greatest and wisest of men in all ages and countries, particularly in Rome and Greece, were renowned for their piety and virtue. It is now my intention to show, how those in our own nation, that have been unquestionably the most eminent for learning and knowledge, were likewise the most eminent for their adherence to the religion of their country. I might produce very shining examples from among the clergy; but because priestcraft is the common cry of every cavilling, empty scribbler, I shall show that all the laymen who have exerted a more than ordinary genius in their writings, and were the glory of their times, were men whose hopes were filled with immortality, and the prospect of future rewards; and men who lived in a dutiful submission to all the doctrines of revealed religion. I shall in this paper only instance Sir Francis Bacon. I was infinitely pleased to find among the works of this extraordinary man a prayer of his own composing, which, for the elevation of thought, and greatness of expression, seems rather the devotion of an angel than a man. His principal fault seems to have been the excess of that virtue which covers a multitude of faults. This betrayed him to so great an indulgence towards his servants, who made a corrupt use of it, that it stripped him of all those riches and honours which a long series of merits had heaped upon him. But in this prayer, at the same time that we find him prostrating himself before the great mercy-seat, and humbled under afflictions, which at that time lay heavy upon him, we see him supported by the sense of his integrity, his zeal, his devotion, and his love to mankind; which give him a much higher figure in the minds of thinking men, than that greatness had done from which he was fallen. I shall beg leave to write down the prayer itself, with the title with it, as it was found amongst his lordship's papers, written in his own hand."

[3] The following is an exact transcript of the title page:—"The Confession of Faith," written by Sir Francis Bacon, printed in the year 1641. In the title page, there is a wood engraving of Sir Francis Bacon: it is a thin 4to of twelve pages, without any printer's name. Mr. D'Israeli kindly lent me a copy. It is similar, but not the same as the present copy. Of the Confession of Faith there are various MSS. in the British Museum; Sloane's 23, 2 copies; Harleian, Vol. 2, 314; Vol. 3, 61: Hargrave's, page 62; the MSS. Burch, 4263, is, I suspect, in Lord Bacon's own writing, with his signature.

[4] 1457.

[5] Opuscula varia posthuma. Londini, ex officina, R. Danielis, 1658.

[6] Baconiana, 72.

[7] The following is in the "Baconiana," p. 209:—

"A letter written by Dr. Roger Maynwaring, to Dr. Rawley concerning the Lord Bacon's Confession of Faith.

"Sir,

"I have, at your command, surveyed this deep and devout tract of your deceased lord, and send back a few notes upon it.

"In page 413, l. 5, (of this volume) are these words:

"'I believe that God is so holy, pure, and jealous, that it is impossible for him to be pleased in any creature, though the work of his own hands; so that neither angel, man, nor world, could stand, or can stand, one moment in his eyes, without

the letters to Lord Bacon,[1] says, "The second is a letter from Dr. Maynwaring to Dr. Rawley, concerning his lordship's 'Confession of Faith.' This is that Dr. Maynwaring, whose sermon upon Eccles. viii. 2, etc., gave such high offence, about one hundred and fifty years ago. "For some doctrines, which he noteth in his lordship's confession, the reader ought to call to mind, the times in which his lordship wrote them, and the distaste of that court against the proceedings of Barnevelt, whose state-faction blemished his creed.

Of this tract there are various MSS.[2] in the British Museum, and one apparently in Lord Bacon's handwriting.[3] It is stated in one of the MSS. to have been written before or when Sir Francis Bacon was Solicitor General,[4] and in the Remains it is entitled, "Confession of Faith, written by Sir Francis Bacon, knight, Viscount St. Albans, about the time the Solicitor General to our late Sovereign Lord King James."[5]

beholding the same in the face of a mediator; and therefore that before him, with whom all things are present, the Lamb of God was slain before all worlds; without which eternal counsel of his, it was impossible for him to have descended to any work of creation; but he should have enjoyed the blessed and individual society of three persons in Godhead only forever.'

"This point I have heard some divines question, whether God, without Christ, did pour his love upon the creature? and I had sometimes a dispute with Dr. Sharp* of your university, who held that the emanation of the Father's love to the creature was immediate. His reason, amongst others, was taken from that text, 'So God loved the world, that he gave his only begotten Son.' Something of that point I have written amongst my papers, which on the sudden I cannot light upon. But I remember that I held the point in the negative, and that St. Austin, in his comment on the fifth chapter to the Romans, gathered by Beda, is strong that way.

"In page 413, line penult, are these words:

"'God, by the reconcilement of the Mediator, turning his countenance towards his creatures, (though not in equal light and degree,) made way unto the dispensation of his most holy and secret will, whereby some of his creatures might stand and keep their state; others might, possibly, fall, and be restored; and others might fall, and not be restored in their estate, but yet remain in being, although under wrath and corruption; all with respect to the Mediator; which is the great mystery, and perfect centre of all God's ways with his creatures; and unto which all his other works and wonders do but serve and refer.'

"Here absolute reprobation seems to be defended, in that the will of God is made the reason of the not-restitution of some; at leastwise his lordship seems to say, that 'twas God's will that some should fall, unless that may be meant of voluntas permissival, (his will of permission.)

"In page 414, l. 10, where he saith, (amongst the generations of men he elected a small flock,) if that were admitted (of fallen men,) it would not be amiss; lest any should conceive that his lordship had meant, the decree had passed on massa incorrupta, (on mankind considered before the fall.)

"In page 415, l. 8, are these words:

"'Man made a total defection from God, presuming to imagine, that the commandments and prohibitions of God were not the rules of good and evil, but that good and evil had their own principles and beginnings.'

"Consider whether this be a rule universal, that the commands and prohibitions of God are the rules of good and evil. For, as St. Austin saith, many things are prohibita quia mala (for that reason forbidden, because they are evil:) as these sins which the schools call specifical.

"In page 415, l. antepen. are these words:

"'The three heavenly unities exceed all natural unities. That is to say, the unity of the three Persons in Godhead, the unity of God and man in Christ, and the unity of Christ and the church; the Holy Ghost being the worker of both these latter unities; for by the Holy Ghost was Christ incarnate, and quickened in flesh; and by the Holy Ghost is man regenerate, and quickened in spirit.'

"Here two of the unities are ascribed to the Holy Ghost. The first seems excluded; yet divines say, that Spiritus Sanctus & amor, & vinculum Patris & Filii, (the Holy Ghost is the love and the bond of the Father and the Son.)

"In page 416, l. 12, are these words:

"'Christ accomplished the whole work of the redemption and restitution of man to a state superior to the angels.'

"This (superior) seems to hit upon that place, ἰσάγγελοι, Luke xx. 36, which argues but equality. Suarez (De Angelis, lib. 1, cap. 1,) saith, that angels are superior to men, quoad gradum intellectualem, & quoad immediatam habitationem ad Deum, (both in respect of the degree of their intellectual nature, and of the nearness of their habitation to God.) Yet St. Austin affirmeth, naturam humanam in Christo perfectiorem esse angelica, (that the human nature in Christ is more perfect than the angelical.) Consider of this. And thus far, not as a critic, or corrector, but as a learner. For,

Corrigere, res est tanto magis ardua, quanto
Magnus, Aristarcho major, Homerus erat.

In haste. Your servant, ROGER MAYNWARING."

[1] Baconiana, 103.

[2] *Sloane*, 2 copies, 23 Cat. *Harleian*, vol. 2, 314—vol. 3, 61. *Hargrave's* p. 62.

[3] MSS. Burch, No. 4263.

[4] Sloane's, 23, and see in Rawley's observations, ante, 396, where he says, "though he composed the same many years before his death," and the same expression is in the passage from the Opuscula.

[5] This tract was republished in 1757. A Confession of Faith, written by the Right Honourable Francis Bacon, Lord Verulam, republished with a Preface on the Subject of Authority in Religious Matters, and adapted to the Exigency of the present Times. London, printed for W. Owen, at Temple-Bar, 1757, 8vo. pp. 26, and in the second volume of Butler's Reminiscences, recently published, in page 232, there is a letter from Dr. Parr containing the following, "You know there is no doubt as to the authenticity of the Confession of Faith, ascribed to Lord Bacon. I am perplexed with it. Was he serious? I mean serious all through? Does he mean it for a tentamen? What inference would Hume have drawn from it?" And in a manuscript kindly communicated to me by Mr. Barker, the doctor says, "that Bacon admitted the received doctrine of the Trinity, is obvious, from the prayer made by him when Chancellor of England, and from various passages of the most unequivocal and emphatical kind in his Confession of Faith.

* The same, I think, who was committed to the Tower, having taught Hoskins his allusion to the Sicilian Vespers. See Reliqu. Wotton, p. 424. Dr. Tenison.

AN ADVERTISEMENT TOUCHING THE CONTROVERSIES OF THE CHURCH OF ENGLAND.

This was first published in the year 1641, without the author's name.[1] The following is the title:

A Wise and Moderate Discourse,
concerning
Church Affaires,
As it was written, long since, by the famous Authour of those Considerations, which seem to have some reference to this.
Now published for the common good.

Imprinted in the yeere 1641.

It was next published with the present title, in the Resuscitatio.

In this tract upon Church Controversies, an arrangement, although not formerly declared, may, as in the Sylva Sylvarum,[2] easily be perceived.[3] The method, with a few extracts well worthy the consideration of ecclesiastical controversialists, is as follows:

§ I.

I. RELIGIOUS CONTROVERSIES WILL EXIST, AND PARTICULARLY IN TIMES OF PEACE.

When the fiery trial of persecution ceaseth, there succeedeth another trial, which, as it were, by contrary blasts of doctrine doth sift and winnow men's faith.

§ II.

II. NATURE OF RELIGIOUS CONTROVERSIES.

1. High nature.
   The high mysteries of faith..... 412
   The great parts of the worship of God..... *ib.*
2. Minor nature, ceremonies, and things indifferent, or those parts of religion which pertain to time, not to eternity..... *ib.*

[1] There is a copy in the British Museum, and MSS. Ays. 4263

In Blackburne's edition, vol. i. 192, he thus notices this tract: "Next follows an Advertisement touching the controversies of the Church of England, p. 418. This treatise was originally printed in the year 1641, without the author's name and under a different title: called, "A wise and moderate discourse concerning church affairs; as it was written long since, by the famous author of those considerations, which seem to have some reference to this." It is plain from p. 428, that it was wrote in the reign of Queen Elizabeth. Dr. Sancroft had collated and corrected this piece in more than a hundred places: and I am to ask the reader's pardon for mislaying the copy containing these his farther emendations.

P. 419, l. 22, parts, *r.* some things, his.
P. 420, l. 6, zeal, *r.* hate.
l. 38, resemble, *r.* agree.
P. 423, l. 33, *r.* pretend zeal.
P. 424, l. 39, *r.* seduce the people.
P. 428, l. 3, exercise, *r.* waste.
P. 429, l. 18, *r.* grope for.

So that I conceive abundant justice is done to this part of our noble author's works.

[2] Dr. Rawley, in his address to the Reader, in the Sylva Sylvarum, says—"I have heard his lordship say also, that one great reason why he would not put these particulars into any exact method, (though he that looketh attentively into them shall find that they have a secret order, was, because he conceived that other men would now think that they could do the like."

[3] The following is an analysis of this subject, at all times of importance, but particularly to a Christian in Christian Controversy.

1. Religious controversies will exist, and particularly in times of peace.
2. Nature of Religious Controversies.
3. Virtues of Religious Controversies.
   1. Christian Forbearance.
   2. Christian Demeanor.
   3. Christian Language.
4. Vices in Controversies.
   1. The Vices of the Clergy.
   2. Nature and Humour of Men, 415.
   3. Detestation of former Heresy, *ib.*
   4. Imitation of Foreign Churches, 416.
   2. In their extension, 417.
      Conduct of Reformers
      Anti-reformers
   3. Unbrotherly Proceedings, 418.
      By the Possessors of Church Government.
      By the opposers.
   4. Improper Publications, 419.

§ III.

III. VIRTUES IN CHRISTIAN CONTROVERSIES.
"Qui pacem tractat non repetitis conditionibus dissidii, is magis animos hominum dulcedine pacis fallit, quam æquitate componit." 412

1. CHRISTIAN FORBEARANCE.
Let every man be swift to hear, slow to speak, slow to wrath..... *ib.*

2. CHRISTIAN DEMEANOR.

3. CHRISTIAN LANGUAGE..... *ib.*
If we did but know the virtue of silence and slowness to speak, our controversies of themselves would close and grow up together..... *ib.*
Brother, if that which you set down as an assertion, you would deliver by way of advice, there were reverence due to your counsel, whereas faith is not due to your affirmation.
A feeling Christian will express in his words a character of zeal or love: although we are not to contend coldly about things which we hold dear.[1]..... 413
Impropriety of wit in religious controversy, "Non est major confusio, quam serii et joci."
A fool should be answered, but not by becoming like unto him..... *ib.*

§ IV.

IV. VICES IN CONTROVERSIES.
1. IN THE OCCASIONS.
1. The Vices of the Clergy.
The imperfections in the conversation and government of those which have chief place in the church, have ever been principal causes and motives of schisms and divisions. For, whilst the bishops and governors of the church continue full of knowledge and good works; whilst they deal with the secular states in all liberty and resolution, according to the majesty of their calling, and the precious care of souls imposed upon them, so long the church is "situated" as it were "upon a hill;" no man maketh question of it, or seeketh to depart from it. The humility of the friars did, for a great time, maintain and bear out the irreligion of bishops and prelates..... 414
2. Prejudices of particular men..... 415
The universities are the seat or the continent of this disease, from whence it is derived into the realm..... *ib.*
3. Detestation of former heresy..... *ib.*
This manner of apprehension doth in some degree possess many in our times. They think it the true touchstone to try what is good and evil, by measuring what is more or less opposite to the institutions of the Church of Rome, be it ceremony, be it policy, or government; yea, be it other institutions of greater weight, that is ever most perfect which is removed most degrees from that church; and that is ever polluted and blemished, which participateth in any appearance with it. This is a subtile and dangerous conceit for men to entertain; apt to delude themselves, more apt to delude the people, and most apt of all to calumniate their adversaries..... 416
4. Imitation of Foreign Churches..... *ib*

2. IMPROPER EXTENSION OF CONTROVERSY.
1. Conduct of Reformers..... 417
2. Conduct of Anti-reformers..... *ib.*
Again, to my lords the bishops I say, that it is hard for them to avoid blame, in the opinion of an indifferent person, in standing so precisely upon altering nothing: "leges, novis legibus non recreatæ, acescunt;" laws, not refreshed with new laws, wax sour. "Qui mala non permutat, in bonis non perseverat:" without change of ill, a man cannot continue the good. To take away many abuses, supplanteth not good orders, but establisheth them. "Morosa moris retentio, res turbulenta est, æque ac novitas;" contentious retaining of customs is a turbulent thing, as well as innovation. A good husband is ever pruning in his vineyard or his field; not unseasonably, indeed, not unskilfully, but lightly; he findeth ever somewhat to do.... *ib*
I pray God to inspire the bishops with a fervent love and care of the people; and that they may not so much urge things in controversy, as things out of controversy, which all men confess to be gracious and good.... 418

3. UNBROTHERLY PROCEEDINGS.
1. By the possessors of church government... *ib.*
Their urging of subscription to their own articles, is but "lacessere, et irritare morbos Ecclesiæ," which otherwise would spend and exercise themselves. "Non consensum quærit sed dissidium, qui, quod factis præstatur, in verbis exigit." He seeketh not unity, but division, which exacteth that in words, which men are content to yield in action.
I know restrained governments are better than remiss; and I am of his mind that said, Better is it to live where nothing is lawful, than where all things are lawful. I dislike that laws should not be continued, or disturbers be unpunished: but laws are likened to the grape, that being too much pressed yields a hard and unwholesome wine.
2. The opposers of church government.
1. Supposition of exclusive perfection..... 420
2. Their manner of preaching..... *ib.*
3. In not acting equally in liberty or restraint *ib.*
4. Indiscriminate statements..... 421
5. Mode of handling Scripture..... *ib*
6. Great reliance on trifles..... *ib.*

4. IMPROPER PUBLICATIONS..... *ib*
The press and pulpit should be freed and discharged of these contentions; neither promotion on the one side, nor glory and heat on the other side, ought to continue those challenges and cartels at the cross.

[1] Fuller says, "The Holy Ghost descended not in the spirit of a vulture, but in the spirit of a dove."

THE CHARACTERS OF A BELIEVING CHRISTIAN IN PARADOXES AND SEEMING CONTRADICTIONS.

This tract, published as it seems in the year 1645, was, in 1648, inserted in the Remains, and in 1730 in Blackburn's edition of Lord Bacon's works.[1] Its authenticity seems to be very doubtful. It was inserted in Blackburn's edition, after the following notice:—"The following fragments were never acknowledged by Dr. Rawley, among the genuine writings of the Lord Bacon; nor dare I say that they come up to the spirit of penetration of our noble author. However, as they are vouched to be authentic in an edition of the Remains of the Lord Verulam, printed 1648; and as Archbishop Sancroft has reflected some credit on them by a careful review, having in very many instances corrected and prepared them for the press, among the other unquestioned writing of his lordship; for these reasons I have assigned them this place, and left every reader to form his own judgment about their importance:" and in a letter from Dr. Parr to his legatee and biographer, E. H. Barker, the doctor says, "it is, however, well known, that some of his fragments were not acknowledged by Dr. Rawley to be genuine, though vouched to be authentic in an edition of the Remains of Lord Verulam, printed in 1648, and though examined, corrected, and prepared for the press by Archbishop Sancroft among the other unquestionable writings of Bacon. Among those fragments are the Characters of a believing Christian, in paradoxes and seeming contradictions, compared with the copy printed Lond. 1645. The paradoxes are thirty-four; but it is sufficient for my purpose to quote the 2d and 3d. After frequent and most attentive perusal, I am convinced that these Fragments were written by Bacon, and intended only for a trial of his skill in putting together propositions, which appear irreconcileable, and that we ought to be very wary in drawing from such a work any positive conclusions upon the real and settled faith of Lord Bacon. Bacon perhaps was sincere, when he said, 'I had rather believe all the fables in the Legend, and the Talmud, and the Alcoran, than that this universal frame is without a mind.' But to many parts of the paradoxes we may apply his remark upon the fool, who *said* in his heart, but did not *think* 'There is no God.' He rather said these things for a trial of skill, as the fool talked by rote, than that he really believed them, or was persuaded of them.[2]

I subjoin the evidence, external and internal, which I have been able to discover in favour and in opposition to their authenticity.

The following are the external reasons against their authenticity—1st, Soon after Lord Bacon's death there were various spurious works ascribed to him, with which the *Remains* abound.[3]—2dly, This tract is not recognised by Dr. Rawley, who in his address to the reader in his *Resuscitatio*, does not mention it amongst the theological works which he enumerates, although he says, "I have compiled in one whatsoever bears the true stamp of his lordship's excellent genius, and hath hitherto

[1] In Dr. Parr's annexed letter, it appears to have been published in 1645; and in Vol. I. of Blackburn's edition, he says, speaking of Archbishop Sancroft, to the characters of a believing Christian in paradoxes, &c. compared with the other copy printed in 1645, I have not been able to see a copy of the tract published in 1645.—B. M.

[2] See Bacon's Essay on Atheism.

Dr. Parr does not speak with as much confidence in a letter to Mr. C. Butler, published in the second volume of Butler's Reminiscences, page 233, where he says, "But now comes a real difficulty. What shall we say to the 'Character of a believing Christian in paradoxes and seeming contradictions?' Here I am quite at a loss to determine. If an ingenious man means to deride the belief of Christianity, could he have done it more effectually than in the work just now alluded to? Mr. Hume would say—No. There is some uncertainty as to the authenticity of this little tract. I suspect that Bacon meant to try his strength, and then to return quietly to the habitual conviction of his mind, that Christianity is true."

[3] In Rawley's Epistle to the Reader in the *Resuscitatio*, he says, "for some of the pieces, herein contained, his lordship did not aim at the publication of them, but at the preservation only, and prohibiting them from perishing, so as to have been reposed in some private shrine, or library: but now, for that, through the loose keeping of his lordship's papers, whilst he lived, divers surreptitious copies have been taken; which have since employed the press with sundry corrupt and mangled editions; whereby nothing hath been more difficult than to find the Lord Saint Alban in the Lord Saint Alban; and which have presented (some of them) rather a fardle of nonsense, than any true expressions of his lordship's happy vein; I thought myself in a sort tied to vindicate these injuries and wrongs done to the monuments of his lordship's pen; and at once, by setting forth the true and genuine writings themselves, to prevent the like invasions for the time to come." And Archbishop Tenison says, "This general acceptance of his works has exposed him to that ill and unjust usage which is common to eminent writers. For on such are fathered, sometime spurious treatises; sometimes most corrupt copies of good originals; sometimes their essays and first thoughts upon good subjects, though laid aside by them unprosecuted and uncorrected; and sometimes the very toys of their youth, written by them in trivial or loose arguments, before they had arrived either at ripeness of judgment, or sobriety of temper. The veriest straws (like that of Father Garnet) are shown to the world as admirable reliques, if the least strokes of the image of a celebrated author, does but seem to be upon them. The press hath been injurious in this kind to the memory of Bishop Andrews, to whom it owed a deep and solemn reverence. In such an unbecoming manner it hath dealt, long ago, with the very learned and ingenious author of the *Vulgar Errors*. Neither hath the Lord Bacon gone without his share in this injustice from the press. He hath been ill dealt with in the letters printed in the Cabala, and Scrinia, under his name: for Dr. Rawley professed, that though they were not wholly false, yet they were very corrupt and embased copies. This I believe the rather, having lately compared some original letters with the copies in that collection, and found them imperfect. And to make a particular instance; in comparing the letter of Sir Walter Raleigh to Sir Robert Car, of whom a fame had gone that he had begged his estate; I found no fewer than forty different, of which some were of moment. Our author hath been still worse dealt with, in a pamphlet in octavo, concerning the trial of the Earl and Countess of Somerset: and likewise in one in quarto, which beareth the title of Bacon's Remains, though there cannot be spied in it, so much as the ruins of his beautiful genius."

slept, and been suppressed, in this present volume, not leaving any thing to a future hand, which I found to be of moment, and communicable to the public, save only some few Latin works, which by God's favour and sufferance, shall soon after follow." And in another part of the same address he says, "I thought myself in a sort tied to vindicate these injuries and wrongs done to the monuments of his lordship's pen; and at once, by setting forth the true and genuine writings themselves, to prevent like invasions for the time to come."—3dly, It is not noticed by Archbishop Tenison, who published the *Baconiana* in 1679, in which he says, "His lordship's writings upon pious subjects are only these: his Confession of Faith, the Questions about a Holy War, and the Prayers in these Remains; and a translation of certain of David's Psalms, into English verse.[1]—4thly, There is not any MSS. of these Paradoxes.[2]

The external reasons in favour of their authenticity are, 1st, They are published in the *Remains*, in 1648, and, although they are not recognised, they are not expressly disowned either in 1657 by Dr. Rawley, or in 1679 by Archbishop Tenison, who does expressly repudiate other works ascribed to Lord Bacon. Whether this silence is negative evidence that the Paradoxes are authentic, or that the friend and admirer of Lord Bacon, after having discredited the *Remains*, did not deem the Paradoxes entitled to a particular refutation, is a question not free from doubt, if it can be supposed that Dr. Rawley and the archbishop were so insincere as, knowing their reality, to express their opinion of Lord Bacon's religious sentiments, and to censure the author of the *Remains*, without doing him the justice to acknowledge that the Paradoxes were authentic. 2dly, Dr. Rawley and Archbishop Tenison admit that there were other MSS. in existence. 3dly, The authenticity of the Paradoxes is supposed to have been acknowledged by Archbishop Sancroft; but upon inquiry it will, perhaps, appear that the archbishop only corrected the copy which was inserted in the *Remains*, by comparing it with the first publication in 1645.[3]

Such is the external evidence. The internal evidence is either from the thought, or the mode in which the thought is expressed.

The reasons against the authenticity of the Paradoxes, from the nature of the thought, are—1st, If a spirit of piety[4] pervades the Paradoxes, it seems to differ from the spirit which moved upon the mind of Lord Bacon;[5] and if the MSS. of this Essay, of which there is not any evidence, had been

[1] Baconiana, page 72.

[2] I venture to assert this, for I have not been able to find a MSS. I should be happy to have my error corrected.

[3] Blackburn, in the fourth volume of his edition of Bacon, A. D. 1730, p. 438, says, "Archbishop Sancroft has reflected some credit on them by a careful review, having in very many instances corrected and prepared them for the press: among the other unquestioned writings of his lordship, I annex some of the passages from Blackburn, where Archbishop Sancroft is mentioned. "Our noble author's letters in the 'Resuscitatio' are in full credit; and yet these are in many instances corrected by Dr. Sancroft, and that uncontestably from MSS.; because the author's subscription, under that prelate's hand, is in several particulars added, as N. X. 'Your lordship's most humbly in all duty. N. XI. Your lordship's in all humbleness to be commanded.' I say I conceive it evident, that these subscriptions to the printed copy of 1657, do ascertain the additions to be made from original MSS., since they could not be added upon judgment or conjecture, but must be inserted from authority. And this gives sanction to the emendations of these letters contained in the 'Resuscitatio;' so that I may presume to think this present edition is even more exact than what Dr. Rawley himself published. Blackburn, vol. i. p. 193.

In page 458, of vol. iv., he says, "I have added some fragments from the quarto edition of the Remains printed in 1648. That copy has been deservedly treated with great indignation and contempt; being notoriously printed, in a surreptitious and negligent manner. However, I do not remember a single page in this scandalous edition, excepting these fragments and the essay of a king, which does not appear in a more correct dress in some part or other of our noble author's works. This seems to give them a little credit; and Dr. Sancroft having corrected them with so much diligence, as to distinguish where he has done it from printed copies, I have some cause to apprehend that the other copies were amended by unquestionable MSS. of our noble author. The order they appear in is, 1. An *Explanation* what manner of persons those should be, that are to execute the power or ordinance of the king's prerogative, p. 3. This is corrected in very many places. 2. Short notes for civil *conversation*, p. 6, interlined in many places, with apt divisions, not observed in the edition of 1648. 3. An *Essay* on Death, p. 7. This is likewise corrected in very many places, and subdivided as if done from MSS., and made a new work. 4. The Characters of a believing *Christian*, in paradoxes and seeming contradictions. This in terms of abatement under the archbishop's own hand stands thus: *Compared with the other copy, printed Lond. anno*, 1645. 5. A Prayer, corrected only in two places, which I must confess does not appear to be cast in the same mould with that printed above, p. 447."

[4] In the year 1762, the third edition of a penny tract of the characteristics was published. The following is a copy of the title page of this tract: Characteristics of a Believing Christian in Paradoxes and Seeming Contradictions. By Francis Bacon, Baron of Verulam, Viscount of St. Alban, and Lord High Chancellor of England, with a preface by a clergyman. The Third Edition. London, printed by M. Lewis, in Paternoster Row, 1762, (price one penny.) The following is the preface: In order to prevent a misconstruction of the following paradoxes, it may be needful to inform the reader, that when rightly considered, they are no ways ludicrous, sarcastical, or prophane, but solid, comfortable, and godly truths, taught by the Holy Ghost in the school of experience, and well understood by them who are truly Christians. I do not say, that every *babe* in Christ can understand them all, but this I think I may venture to affirm, he that understands none of them, hath not yet learned his A. B. C. in the school of Christ. But if any should ask me, why I choose to publish his lordship's paradoxes rather than any other? I answer—1st, Because, though very comprehensive, yet they are but short, and may therefore be easily purchased by the poorer sort of Christians. 2dly, That the *minute* philosophers and *ignoble* gentlemen of our day might hence be taught, that a fine gentleman, a sound scholar, and a great philosopher, may be a Christian; since we find not only *Paul*, a *Justin Martyr*, *&c.*, but even in our own nation, so great a philosopher as my *Lord Bacon*, espousing and confessing the Christian verity. In a word, reader, if thou understandest these few paradoxes, bless God for them; if thou understandest them not, thou mayest, like the *Eunuch*, call in some *Philip* to thy assistance: but above all permit me to advise thee to ask of the Father of lights, who giveth wisdom liberally and upbraideth not. I am, for Christ's sake, thy friend and servant, F. Green.

Take any, for instance Paradox 34. "His advocate, his surety shall be his judge; his mortal part shall become immo-

found amongst the papers of Lord Bacon, would it not be more probable that they were the effusion of one of his pious friends, Herbert for instance, than that they were Lord Bacon's own production? 2d. If the Paradoxes are supposed to be polluted by an under current of infidelity, the very supposition is evidence against their authenticity, "for this lord was religious, and was able to render a reason of the hope which was in him.[1] He repaired frequently to the service of the church, to hear sermons, to the administration of the sacrament of the blessed body and blood of Christ, and died in the true faith, established in the Church of England."[2]

The internal evidence against the authenticity of the Paradoxes from the style is, that—1st, They, in style, are in opposition to the whole tenor of Lord Bacon's works, which endeavours to make doubtful things clear, not clear things doubtful.[3] 2d, The style of the Paradoxes, if they are supposed to contain an indirect attack upon Christianity, are in opposition to Lord Bacon's opinion of the proper style for religious controversy. "To search, he says, and rip up wounds with laughing countenance, to intermix Scripture and scurrility sometimes in one sentence, is a thing far from the devout reverence of a Christian, and scant beseeming the honest regard of a sober man. 'Non est major confusio quam serii et joci.' There is no greater confusion than the confounding of jest and earnest. The majesty of religion, and the contempt and deformity of things ridiculous, are things as distant as things may be. Two principal causes have I ever known of atheism; curious controversies, and profane scoffing. 3d, They have not any resemblance to the style of Lord Bacon; they are neither poetical, adorned by imagery,[4] nor learned, enriched by rare quotation; nor familiar, illustrated by examples,[5]

tal; and what was sown in corruption and defilement shall be raised in incorruption and glory; and a finite creature shall possess an infinite happiness. Glory be to God." *Compare this with his prayer.* "Remember, O Lord, how thy servant hath walked before thee: remember what I have first sought, and what hath been principal in my intentions. I have loved thy assemblies: I have mourned for the divisions of thy church: I have delighted in the brightness of thy sanctuary. This vine which thy right hand hath planted in this nation, I have ever prayed unto thee, that it might have the first and the latter rain; and that it might stretch her branches to the seas and to the floods. The state and bread of the poor and oppressed have been precious in mine eyes: I have hated all cruelty and hardness of heart: I have, though in a despised weed, procured the good of all men. If any have been my enemies, I thought not of them; neither hath the sun almost set upon my displeasure; but I have been as a dove, free from superfluity of maliciousness. Thy creatures have been my books, but thy scriptures much more. I have sought thee in the courts, fields, and gardens, but I have found thee in thy temples."

[1] So in the Religio Medici, Sir Thomas Brown says, "For my religion, though there be several circumstances that might perswade the world I have none at all, as the generall scandal of my profession, the natural course of my studies, the indifferency of my behaviour, and discourse in matters of religion, neither violently defending one, nor with that common ardour and contention opposing another; yet in despight hereof I dare, without usurpation, assume the honorable stile of a Christian; not that I meerely owe this stile to the font, my education or clime wherein I was borne as being bred up either to confirme those principles my parents instilled into my unwary understanding; or by a generall consent proceed in the religion of my countrey. But having, in my riper years, and confirmed judgment seene and examined all, I find myselfe obliged by the principles of grace, and the law of mine owne reason to embrace no other name but this; neither doth herein my zeale so fare make me forget the generall charitie I owe unto humanity, as rather to hate than pity Turkes, Infidels and (what is worse) Jewes, rather contenting myself to enjoy that happy stile, than maligning those who refuse so glorious a title."

[2] Such are the words of Dr. Rawley.

[3] In some part of his works, I do not recollect where, he says, "I endeavour not to inflate trifles into marvails, but to reduce marvails to plain things:" and Rawley, in his life of Lord Bacon, says, "In the composing of his books he had rather drive at a masculine and clear expression, than at any fineness or affectation of phrases, and would often ask if the *meaning* were expressed *plainly enough*, as being one that accounted *words* to be but *subservient*, or *ministeriall* to matter; and not the *principall*. And if his *stile* were *polite*, it was because he could do no otherwise; neither was he given to any *light conceits*; or *descanting* upon *words*, but did ever, purposely and industriously avoyd them; for he held such things to be but *digressions or diversions* from the *scope* intended; and to derogate from the *weight* and *dignity* of the stile."

[4] As a specimen of his mode of illustrating by imagery, see the Advancement of Learning, vol. ii. page 177. In "Orpheus's theatre, where all beasts and birds assembled; and, forgetting their several appetites, some of prey, some of game, some of quarrel, stood all sociably together, listening to the airs and accords of the harp; the sound whereof no sooner ceased, or was drowned by some louder noise, but every beast returned to his own nature: wherein is aptly described the nature and condition of men, who are full of savage and unreclaimed desires of profit, of lust, of revenge; which as long as they give ear to precepts, to laws, to religion, sweetly touched with eloquence and persuasion of books, of sermons, of harangues, so long is society and peace maintained; but if these instruments be silent, or that sedition and tumult make them not audible, all things dissolve into anarchy and confusion."

[5] In the Treatise De Augmentis, lib. v. 2, upon literate experience or invention, not by art but by accident, he says, speaking of the error in supposing that experiments will succeed without due consideration of quantity of matter, "It is not altogether safe to rely upon any natural experiment, before proof be made both in a lesser, and greater quantity. Men should remember the mockery of Æsop's housewife, who conceited that by doubling her measure of barley, her hen would daily lay her two eggs; but the hen grew fat, and laid none." As specimens of his familiar illustration, see also the Advancement of Learning, when speaking of studies teeming with error, he says, "Surely to alchemy this right is due, that it may be compared to the husbandman whereof Æsop makes the fable; that, when he died, told his sons, that he had left unto them gold buried under ground in his vineyard; and they digged over all the ground, and gold they found none: but by reason of their stirring and digging the mould about the roots of their vines, they had a great vintage the year following: so assuredly the search and stir to make gold hath brought to light a great number of good and fruitful inventions and experiments, as well for the disclosing of nature as for the use of man's life." See again in exhibiting the nature of the philosophy of universals, "Philosophia Prima," the connection between all parts of nature, he says, "is not the delight of the quavering upon a stop in music, the same with the playing of light upon the water?

"'Splendet tremulo sub lumine pontus:'"—See vol. i. p. 194.

I could willingly indulge myself with the selection of other instances, but remembering the admonition that "it is not granted to love and to be wise," I stop.

as in most of his philosophical works; nor written pressly[1] and weighti y,[2] as the Novum Organum: but they seem remarkable only for antithesis, something like Fuller, without his spirit: a sort of dry Fuller, or, as he would say, Fuller's earth: or like the Essay on Death, published also in the Remains, and ascribed without authority to the same illustrious author.[3]

The evidence in favour of the authenticity of the Paradoxes, from the style, is, that—1. Aphorisms are the favourite style of Lord Bacon.[4] 2. The paradoxes contain two of Lord Bacon's expressions; the one is in the beginning of the 26th Paradox, "He is often tossed and shaken, yet is as Mount Sion: he is a serpent and a dove."[5] The other in the 10th Paradox. "He lends and gives most freely, and yet he is the greatest usurer."[6] 3d. That although the Paradoxes do not contain any patent internal evidence of their authenticity, yet there is latent evidence from the dissimilarity of the style, as Lord Bacon, knowing how to discover the mind through words,[7] well knew the art of concealment, by which he could cast a cloud about him so as to obscure himself from his enemies. To this refined reason which, without proving the authenticity of the Paradoxes, shows only that, by possibility, they may be authentic, it is sufficient to say that, as they were not published or intended for publication, it seems difficult to discover any assignable cause for this mystery.

CONSIDERATIONS TOUCHING THE PACIFICATION OF THE CHURCH.

This was published in 1640, and there are copies in the British Museum, and at Cambridge: and a MSS. in Sloane's Collection, 23.

THE TRANSLATION OF CERTAIN PSALMS.

This was published in 8vo. in 1625, and in the *Resuscitatio.*

HOLY WAR.

This was written and published in 4to. in 1623, and in 1629; and there are MSS. in the British Museum.

[1] Ben Jonson in his Discoveries says, Dominus Verulamius.—One though he be excellent, and the chief, is not to be imitated alone; for no imitator ever grew up to his author: likeness is always on this side of truth; yet there happened in my time one noble speaker, who was full of gravity in his speaking. His language (where he could spare or pass by a jest) was nobly censorious. No man ever spake more neatly, more pressly, more weightily, or suffered less emptiness, less idleness, in what he uttered. No member of his speech but consisted of his own graces. His hearers could not cough, or look aside from him without loss. He commanded where he spoke; and had his judges angry and pleased at his devotion. No man had their affections more in his power. The fear of every man that heard him was lest he should make an end.

[2] Take for instance any of the Nervous Aphorisms, in the Novum Organum, and compare it with the sentences of the Paradoxes.

See Preface to vol. i.

[4] No man was, for his own sake, less attached to system or ornament than Lord Bacon. A plain, unadorned style in aphorisms, in which the *Novum Organum* is written, is, he invariably states, the proper style for philosophy. In the midst of his own arrangement, in the Advancement of Learning, he says: "The worst and most absurd sort of triflers are those who have pent the whole art into strict methods and narrow systems, which men commonly cry up for the sake of their regularity and style." Then see Advancement of Learning.

[5] This union of the serpent and the dove is a favourite image of Lord Bacon's. See the Advancement of Learning, vol. i. p. 223: "It is not possible to join serpentine wisdom with the columbine innocency, except men know exactly all the conditions of the serpent; his baseness and going upon his belly, his volubility and lubricity, his envy and sting, and the rest; that is, all forms and natures of evil: for without this, virtue lieth open and unfenced." See also the Meditationes Sacræ, "of the innocency of the dove, and the wisdom of the serpent."

[6] See Apophthegm 143, in vol. i. p. 115, it is as follows:

"They would say of the Duke of Guise, Henry, that had sold and oppignerated all his patrimony, to suffice the great donatives that he had made; that he was the greatest usurer of France, because all his state was in obligations."

[7] See Treatise De Augmentis, b. vi. c. 1, § 11.

THEOLOGICAL TRACTS.

A PRAYER, OR PSALM,

MADE BY THE

LORD BACON, CHANCELLOR OF ENGLAND.

Most gracious Lord God, my merciful Father, from my youth up, my Creator, my Redeemer, my Comforter. Thou, O Lord, soundest and searchest the depths and secrets of all hearts: thou acknowledgest the upright of heart: thou judgest the hypocrite: thou ponderest men's thoughts and doings as in a balance: thou measurest their intentions as with a line: vanity and crooked ways cannot be hid from thee.

Remember, O Lord, how thy servant hath walked before thee: remember what I have first sought, and what hath been principal in my intentions. I have loved thy assemblies: I have mourned for the divisions of thy church: I have delighted in the brightness of thy sanctuary. This vine, which thy right hand hath planted in this nation, I have ever prayed unto thee, that it might have the first and the latter rain; and that it might stretch her branches to the seas and to the floods. The state and bread of the poor and oppressed have been precious in mine eyes: I have hated all cruelty and hardness of heart: I have, though in a despised weed, procured the good of all men. If any have been my enemies, I thought not of them; neither hath the sun almost set upon my displeasure; but I have been as a dove, free from superfluity of maliciousness. Thy creatures have been my books, but thy Scriptures much more. I have sought thee in the courts, fields, and gardens, but I have found thee in thy temples.

Thousands have been my sins, and ten thousands my transgressions; but thy sanctifications have remained with me, and my heart, through thy grace, hath been an unquenched coal upon thine altar. O Lord, my strength, I have since my youth met with thee in all my ways, by thy fatherly compassions, by thy comfortable chastisements, and by thy most visible providence. As thy favours have increased upon me, so have thy corrections; so as thou hast been always near me, O Lord; and ever as my worldly blessings were exalted, so secret darts from thee have pierced me; and when I have ascended before men, I have descended in humiliation before thee. And now, when I thought most of peace and honour, thy hand is heavy upon me, and hath humbled me according to thy former loving-kindness, keeping me still in thy fatherly school, not as a bastard, but as a child. Just are thy judgments upon me for my sins, which are more in number than the sands of the sea, but have no proportion to thy mercies; for what are the sands of the sea, earth, heavens, and all these are nothing to thy mercies. Besides my innumerable sins, I confess before thee, that I am debtor to thee for the gracious talent of thy gifts and graces, which I have neither put into a napkin, nor put it, as I ought, to exchangers, where it might have made best profit, but misspent it in things for which I was least fit: so I may truly say, my soul hath been a stranger in the course of my pilgrimage. Be merciful unto me, O Lord, for my Saviour's sake, and receive me into thy bosom, or guide me in thy way.

A PRAYER

MADE AND USED BY THE LORD CHANCELLOR BACON.

O eternal God, and most merciful Father in Jesus Christ: Let the words of our mouths, and the meditations of our hearts be now and ever gracious in thy sight, and acceptable unto thee, O Lord, our God, our strength, and our Redeemer.

O eternal God, and most merciful Father in Jesus Christ, in whom thou hast made a covenant of grace and mercy with all those that come unto thee in him; in his name and mediation we humbly prostrate ourselves before the throne of thy mercies' seat, acknowledging that, by the breach

of all thy holy laws and commandments, we are become wild olive branches, strangers to thy covenant of grace; we have defaced in ourselves thy sacred image imprinted in us by creation; we have sinned against heaven and before thee, and are no more worthy to be called thy children. O admit us into the place even of hired servants. Lord, thou hast formed us in our mothers' wombs, thy providence hath hitherto watched over us, and preserved us unto this period of time: O stay not the course of thy mercies and loving-kindness towards us: have mercy upon us, O Lord, for thy dear Son Christ Jesus' sake, who is the way, the truth, and the life. In him, O Lord, we appeal from thy justice to thy mercy, beseeching thee in his name, and for his sake only, thou wilt be graciously pleased freely to pardon and forgive us all our sins and disobedience, whether in thought, word, or deed, committed against thy divine majesty; and in his precious blood-shedding, death, and perfect obedience, free us from the guilt, the stain, the punishment, and dominion of all our sins, and clothe us with his perfect righteousness. There is mercy with thee, O Lord, that thou mayest be feared; yea, thy mercies swallow up the greatness of our sins: speak peace to our souls and consciences; make us happy in the free remission of all our sins, and be reconciled to thy poor servants in Jesus Christ, in whom thou art well pleased: suffer not the works of thine own hands to perish; thou art not delighted in the death of sinners, but in their conversion. Turn our hearts, and we shall be turned; convert us, and we shall be converted; illuminate the eyes of our minds and understanding with the bright beams of thy Holy Spirit, that we may daily grow in the saving knowledge of the heavenly mystery of our redemption, wrought by our dear Lord and Saviour Jesus Christ; sanctify our wills and affection by the same Spirit, the most sacred fountain of all grace and goodness; reduce them to the obedience of thy most holy will in the practice of all piety toward thee, and charity towards all men. Inflame our hearts with thy love, cast forth of them what displeaseth thee, all infidelity, hardness of heart, profaneness, hypocrisy, contempt of thy holy word and ordinances, all uncleanness, and whatsoever advanceth itself in opposition to thy holy will. And grant that henceforth, through thy grace, we may be enabled to lead a godly, holy, sober, and Christian life, in true sincerity and uprightness of heart before thee. To this end, plant thy holy fear in our hearts, grant that it may never depart from before our eyes, but continually guide our feet in the paths of thy righteousness, and in the ways of thy commandments: increase our weak faith, grant it may daily bring forth the true fruits of unfeigned repentance, that by the power of the death of our Lord and Saviour Jesus Christ we may daily die unto sin, and by the power of his resurrection we may be quickened, and raised up to newness of life, may be truly born anew, and may be effectually made partakers of the first resurrection, that then the second death may never have dominion over us. Teach us, O Lord, so to number our days, that we may apply our hearts unto wisdom; make us ever mindful of our last end, and continually to exercise the knowledge of grace in our hearts, that in the said divorce of soul and body, we may be translated here to that kingdom of glory prepared for all those that love thee, and shall trust in thee; even then and ever, O Lord, let thy holy angels pitch their tents round about us, to guard and defend us from all the malice of Satan, and from all perils both of soul and body. Pardon all our unthankfulness, make us daily more and more thankful for all thy mercies and benefits daily poured down upon us. Let these our humble prayers ascend to the throne of grace, and be granted not only for these mercies, but for whatsoever else thy wisdom knows needful for us; and for all those that are in need, misery, and distress, whom, Lord, thou hast afflicted either in soul or body; grant them patience and perseverance in the end, and to the end: And that, O Lord, not for any merits of ours, but only for the merits of thy Son, and our alone Saviour Christ Jesus; to whom with thee and the Holy Spirit be ascribed all glory, &c. *Amen.*

THE STUDENT'S PRAYER.

To God the Father, God the Word, God the Spirit, we pour forth most humble and hearty supplications; that he remembering the calamities of mankind, and the pilgrimage of this our life, in which we wear out days few and evil, would please to open to us new refreshments out of the fountains of his goodness, for the alleviating of our miseries. This also we humbly and earnestly beg, that human things may not prejudice such as are divine; neither that from the unlocking of the gates of sense, and the kindling of a greater natural light, any thing of incredulity, or intellectual night, may arise in our minds towards divine mysteries. But, rather, that by our mind thoroughly cleansed and purged from fancy and vanities, and yet subject and perfectly given up to the divine oracles, there may be given unto faith the things that are faith's. *Amen.*

THE WRITER'S PRAYER.

Thou, O Father, who gavest the visible light as the first-born of thy creatures, and didst pour into man the intellectual light as the top and consummation of thy workmanship, be pleased to protect and govern this work, which coming from thy goodness, returneth to thy glory. Thou after

thou hadst reviewed the works which thy hands had made, beheldest that every thing was very good, and thou didst rest with complacency in them. But man, reflecting on the works which he had made, saw that all was vanity and vexation of spirit, and could by no means acquiesce in them. Wherefore, if we labour in thy works with the sweat of our brows, thou wilt make us partakers of thy vision and thy Sabbath. We humbly beg that this mind may be steadfastly in us; and that thou, by our hands, and also by the hands of others, on whom thou shalt bestow the same spirit, wilt please to convey a largess of new alms to thy family of mankind. These things we commend to thy everlasting love, by our Jesus, thy Christ, God with us. *Amen.*

A CONFESSION OF FAITH,

WRITTEN BY

THE RIGHT HONOURABLE FRANCIS BACON, BARON OF VERULAM, &c.

I BELIEVE that nothing is without beginning, but God; no nature, no matter, no spirit, but one, only, and the same God. That God, as he is eternally almighty, only wise, only good, in his nature; so he is eternally Father, Son, and Spirit, in persons.

I believe that God is so holy, pure, and jealous, as it is impossible for him to be pleased in any creature, though the work of his own hands; so that neither angel, man, nor world, could stand, or can stand, one moment in his eyes, without beholding the same in the face of a Mediator; and, therefore, that before him, with whom all things are present, the Lamb of God was slain before all worlds: without which eternal counsel of his, it was impossible for him to have descended to any work of creation; but he should have enjoyed the blessed and individual society of three persons in Godhead forever.

But that, out of his eternal and infinite goodness and love purposing to become a Creator, and to communicate to his creatures, he ordained in his eternal counsel, that one person of the Godhead should be united to one nature, and to one particular of his creatures: that so, in the person of the Mediator, the true ladder might be fixed, whereby God might descend to his creatures, and his creatures might ascend to God: so that God, by the reconcilement of the Mediator, turning his countenance towards his creatures, though not in equal light and degree, made way unto the dispensation of his most holy and secret will: whereby some of his creatures might stand, and keep their state, others might possibly fall, and be restored; and others might fall, and not be restored to their estate, but yet remain in being, though under wrath and corruption: all with respect to the Mediator; which is the great mystery and perfect centre of all God's ways with his creatures, and unto which all his other works and wonders do but serve and refer.

That he chose, according to his good pleasure, man to be that creature, to whose nature the person of the eternal Son of God should be united; and amongst the generations of men, elected a small flock, in whom, by the participation of himself, he purposed to express the riches of his glory; all the ministration of angels, damnation of devils and reprobates, and universal administration of all creatures, and dispensation of all times, having no other end, but as the ways and ambages of God, to be further glorified in his saints, who are one with their head the Mediator, who is one with God.

That by the virtue of this his eternal counsel he condescended of his own good pleasure, and according to the times and seasons to himself known, to become a Creator; and by his eternal Word created all things; and by his eternal Spirit doth comfort and preserve them.

That he made all things in their first estate good, and removed from himself the beginning of all evil and vanity into the liberty of the creature; but reserved in himself the beginning of all restitution to the liberty of his grace; using, nevertheless, and turning the falling and defection of the creature, which to his prescience was eternally known, to make way to his eternal counsel, touching a Mediator, and the work he purposed to accomplish in him.

That God created spirits, whereof some kept their standing, and others fell: he created heaven and earth, and all their armies and generations; and gave unto them constant and everlasting laws, which we call nature; which is nothing but the laws of the creation; which laws, nevertheless

have had three changes or times, and are to have a fourth or last. The first, when the matter of heaven and earth was created without forms: the second, the interim of perfection of every day's work: the third, by the curse, which, notwithstanding, was no new creation: and the last, at the end of the world, the manner whereof is not yet fully revealed: so as the laws of nature, which now remain and govern inviolably till the end of the world, began to be in force when God first rested from his works, and ceased to create; but received a revocation, in part, by the curse; since which time they change not.

That, notwithstanding God had rested and ceased from creating since the first Sabbath, yet, nevertheless, he doth accomplish and fulfil his divine will in all things, great and small, singular and general, as fully and exactly by providence, as he could by miracle and new creation, though his working be not immediate and direct, but by compass; not violating nature, which is his own law, upon the creature.

That at the first, the soul of man was not produced by heaven or earth, but was breathed immediately from God: so that the ways and proceedings of God with spirits are not included in nature: that is, in the laws of heaven and earth; but are reserved to the law of his secret will and grace, wherein God worketh still, and resteth not from the work of redemption, as he resteth from the work of creation: but continueth working till the end of the world: what time that work also shall be accomplished, and an eternal sabbath shall ensue. Likewise, that whensoever God doth transcend the law of nature by miracles, which may ever seem as new creations, he never cometh to that point or pass, but in regard of the work of redemption, which is the greater, and whereto all God's signs and miracles do refer.

That God created man in his own image, in a reasonable soul, in innocency, in free-will, and in sovereignty; that he gave him a law and commandment, which was in his power to keep, but he kept it not; that man made a total defection from God, presuming to imagine that the commandments and prohibitions of God were not the rules of good and evil, but that good and evil had their own principles and beginnings, and lusted after the knowledge of those imagined beginnings; to the end to depend no more upon God's will revealed, but upon himself, and his own light, as a god: than the which there could not be a sin more opposite to the whole law of God: that yet, nevertheless, this great sin was not originally moved by the malice of man, but was insinuated by the suggestion and instigation of the devil, who was the first defected creature, and fell of malice, and not by temptation.

That upon the fall of man, death and vanity entered by the justice of God, and the image of God in man was defaced; and heaven and earth, which were made for man's use, were subdued to corruption by his fall; but then, that instantly, and without intermission of time, after the word of God's law became, through the fall of man, frustrate as to obedience, there succeeded the greater word of the promise, that the righteousness of God might be wrought by faith.

That as well the law of God, as the word of his promise endure the same forever; but that they have been revealed in several manners, according to the dispensation of times. For the law was first imprinted in that remnant of light of nature, which was left after the fall, being sufficient to accuse. Then it was more manifestly expressed in the written law; and was yet more opened by the prophets; and, lastly, expounded in the true perfection, by the Son of God, the great Prophet, and perfect interpreter, as also fulfiller of the law. That likewise the word of the promise was manifested and revealed, first, by immediate revelation and inspiration; after, by figures, which were of two natures: the one, the rites and ceremonies of the law; the other, the continual history of the old world, and church of the Jews: which, though it be literally true, yet it is pregnant of a perpetual allegory and shadow of the work of the redemption to follow. The same promise or evangile was more clearly revealed and declared by the prophets, and then by the Son himself, and lastly by the Holy Ghost, which illuminateth the church to the end of the world.

That in the fulness of time, according to the promise and oath, of a chosen lineage descended the blessed seed of the woman, Jesus Christ, the only begotten Son of God and Saviour of the world; who was conceived by the power and overshadowing of the Holy Ghost, and took flesh of the Virgin Mary; that the Word did not only take flesh, or was joined to flesh, but was made flesh, though without confusion of substance or nature; so as the eternal Son of God and the ever blessed Son of Mary was one person—so one, as the blessed virgin may be truly and catholicly called "Deipera," the mother of God. So one as there is no unity in universal nature, not that of the soul and body of man, so perfect: for the three heavenly unities, whereof that is the second, exceed all natural unities: that is to say, the unity of the three persons in Godhead; the unity of God and man in Christ; and the unity of Christ and the church. The Holy Ghost being the worker of both these latter unities; for by the Holy Ghost was Christ incarnate and quickened in flesh; and by the Holy Ghost is man regenerate and quickened in spirit.

That Jesus, the Lord, became in the flesh a sacrificer and a sacrifice for sin; a satisfaction and price to the justice of God; a meriter of glory and the kingdom; a pattern of all righteousness; a preacher of the word which himself was; a finisher of the ceremonies; a corner-stone to re-

move the separation between Jew and Gentile; an intercessor for the church; a lord of nature in his miracles; a conqueror of death and the power of darkness in his resurrection; and that he fulfilled the whole counsel of God, performing all his sacred offices and anointing on earth, accomplished the whole work of the redemption and restitution of man to a state superior to the angels; whereas the state of man by creation was inferior; and reconciled and established all things according to the eternal will of the Father.

That in time, Jesus the Lord was born in the days of Herod, and suffered under the government of Pontius Pilate, being deputy of the Romans, and under the high priesthood of Caiaphas, and was betrayed by Judas, one of the twelve apostles, and was crucified at Hierusalem, and after a true and natural death, and his body laid in the sepulchre, the third day he raised himself from the bonds of death, and arose and showed himself to many chosen witnesses, by the space of divers days, and at the end of those days, in the sight of many, ascended into heaven; where he continueth his intercession; and shall from thence, at the day appointed, come in greatest glory to judge the world.

That the sufferings and merits of Christ, as they are sufficient to do away the sins of the whole world, so they are only effectual to those which are regenerated by the Holy Ghost; who breatheth where he will of free grace; which grace, as a seed incorruptible, quickeneth the spirit of man, and conceiveth him anew a son of God and a member of Christ: so that, Christ having man's flesh, and man having Christ's spirit, there is an open passage and mutual imputation; whereby sin and wrath was conveyed to Christ from man, and merit and life is conveyed to man from Christ: which seed of the Holy Ghost first figureth in us the image of Christ slain or crucified, through a lively faith; and then reneweth in us the image of God in holiness and charity; though both imperfectly, and in degrees far differing even in God's elect, as well in regard of the fire of the Spirit, as of the illumination thereof; which is more or less in a large proportion: as, namely, in the church before Christ; which yet, nevertheless, was partaker of one and the same salvation with us, and of one and the same means of salvation with us.

That the work of the Spirit, though it be not tied to any means in heaven or earth, yet, it is ordinarily dispensed by the preaching of the word; the administration of the sacraments; the covenants of the fathers upon the children, prayer, reading; the censures of the church; the society of the godly; the cross and afflictions; God's benefits; his judgments upon others; miracles; the contemplation of his creatures: all which, though some be more principal, God useth as the means of vocation and conversion of his elect; not derogating from his power to call immediately by his grace, and at all hours and moments of the day, that is, of man's life, according to his good pleasure.

That the word of God, whereby his will is revealed, continued in revelation and tradition until Moses; and that the Scriptures were from Moses's time to the time of the apostles and evangelists; in whose age, after the coming of the Holy Ghost, the teacher of all truth, the book of the Scriptures was shut and closed, so as not to receive any new addition; and that the church hath no power over the Scriptures to teach or command any thing contrary to the written word, but is as the ark, wherein the tables of the first testament were kept and preserved: that is to say, the church hath only the custody and delivery over of the Scriptures committed unto the same; together with the interpretation of them, but such only as is conceived from themselves.

That there is a universal or catholic church of God, dispersed over the face of the earth, which is Christ's spouse, and Christ's body; being gathered of the fathers of the old world, of the church of the Jews, of the spirits of the faithful dissolved, and the spirits of the faithful militant, and of the names yet to be born, which are already written in the book of life. That there is also a visible church, distinguished by the outward works of God's covenant, and the receiving of the holy doctrine, with the use of the mysteries of God, and the invocation, and sanctification of his holy name. That there is also a holy succession in the prophets of the New Testament and fathers of the church, from the time of the apostles and disciples which saw our Saviour in the flesh, unto the consummation of the work of the ministry; which persons are called from God by gift, or inward anointing; and the vocation of God followed by an outward calling and ordination of the church.

I believe, that the souls of such as die in the Lord are blessed, and rest from their labours, and enjoy the sight of God, yet so, as they are in expectation of a farther revelation of their glory in the last day. At which time all flesh of man shall arise and be changed, and shall appear and receive from Jesus Christ his eternal judgment: and the glory of the saints shall then be full: and the kingdom shall be given up to God the Father: from which time all things shall continue forever in that being and state, which then they shall receive. So, as there are three times, if times they may be called, or parts of eternity: The first, the time before beginnings, when the Godhead was only, without the being of any creature: the second, the time of the mystery, which continueth from the creation to the dissolution of the world: and the third, the time of the revelation of the sons of God; which time is the last, and is everlasting, without change.

THE CHARACTERS OF A BELIEVING CHRISTIAN,

In paradoxes and seeming contradictions.

1. A CHRISTIAN is one that believes things his reason cannot comprehend; he hopes for things which neither he nor any man alive ever saw: he labours for that which he knoweth he shall never obtain; yet, in the issue, his belief appears not to be false; his hope makes him not ashamed; his labour is not in vain.

2. He believes three to be one, and one to be three; a father not to be elder than his son; a son to be equal with his father; and one proceeding from both to be equal with both; he believing three persons in one nature, and two natures in one person.

3. He believes a virgin to be a mother of a son; and that very son of her's to be her maker. He believes him to have been shut up in a narrow room, whom heaven and earth could not contain. He believes him to have been born in time, who was and is from everlasting. He believes him to have been a weak child, carried in arms, who is the Almighty; and him once to have died, who only hath life and immortality in himself.

4. He believes the God of all grace to have been angry with one that hath never offended him; and that God, that hates sin, to be reconciled to himself, though sinning continually, and never making, or being able to make him satisfaction. He believes a most just God to have punished a most just person, and to have justified himself, though a most ungodly sinner. He believes himself freely pardoned, and yet a sufficient satisfaction was made for him.

5. He believes himself to be precious in God's sight, and yet loathes himself in his own. He dares not justify himself even in those things wherein he can find no fault with himself, and yet believes God accepts him in those services wherein he is able to find many faults.

6. He praises God for his justice, and yet fears him for his mercy. He is so ashamed as that he dares not open his mouth before God; and yet he comes with boldness to God, and asks him any thing he needs. He is so humble as to acknowledge himself to deserve nothing but evil; and yet believes that God means him all good. He is one that fears always, yet is as bold as a lion. He is often sorrowful, yet always rejoicing; many times complaining, yet always giving of thanks. He is the most lowly-minded, yet the greatest aspirer; most contented, yet ever craving.

7. He bears a lofty spirit in a mean condi ion; when he is ablest, he thinks meanest of himself. He is rich in poverty, and poor in the midst of riches. He believes all the world to be his, yet he dares take nothing without special leave from God. He covenants with God for nothing, yet looks for a great reward. He loseth his life and gains by it; and whilst he loseth it, he saveth it.

8. He lives not to himself, yet, of all others, he is most wise for himself. He denieth himself often, yet, no man loveth himself so well as he. He is most reproached, yet most honoured. He hath most afflictions, and most comforts.

9. The more injury his enemies do him, the more advantages he gains by them. The more he forsakes worldly things, the more he enjoys them.

10. He is the most temperate of all men, yet fares most deliciously; he lends and gives most freely, yet he is the greatest usurer; he is meek towards all men, yet inexorable by men. He is the best child, husband, brother, friend; yet hates father and mother, brother and sister. He loves all men as himself, yet hates some men with a perfect hatred.

11. He desires to have more grace than any man hath in the world, yet is truly sorrowful when he seeth any man have less than himself; he knoweth no man after the flesh, yet gives all men their due respects; he knoweth if he please man he cannot be the servant of Christ; yet, for Christ's sake he pleaseth all men in all things. He is a peace-maker, yet is a continual fighter, and is an irreconcileable enemy.

12. He believes him to be worse than an infidel that provides not for his family, yet himself lives and dies without care. He accounts all his superiors, yet stands stiffly upon authority. He is severe to his children, because he loveth them; and by being favourable unto his enemy, he revengeth himself upon him.

13. He believes the angels to be more excellent creatures than himself, and yet accounts them his servants. He believes that he receives many good things by their means, and yet he neither prays for their assistance, nor offers them thanks, which he doth not disdain to do to the meanest Christian.

14. He believes himself to be a king, how mean soever he be: and how great soever he be, yet he thinks himself not too good to be a servant to the poorest saint.

15. He is often in prison, yet always at liberty; a freeman, though a servant. He loves not honour amongst men, yet highly prizeth a good name.

16. He believes that God hath bidden every man that doth him good to do so; he yet, of any man is the most thankful to them that do aught for him. He would lay down his life to save the soul of his enemy, yet, will not adventure upon one sin to save the life of him who saved his.

17. He swears to his own hindrance, and changeth not; yet knoweth that his oath cannot tie him to sin.

18. He believes Christ to have no need of any thing he doth, yet maketh account that he doth relieve Christ in all his acts of charity. He

knoweth he can do nothing of himself, yet labours to work out his own salvation. He professeth he can do nothing, yet as truly professeth he can do all things: he knoweth that flesh and blood cannot inherit the kingdom of God, yet believeth he shall go to heaven both body and soul.

19. He trembles at God's word, yet counts it sweeter to him than honey and the honey-comb, and dearer than thousands of gold and silver.

20. He believes that God will never damn him, and yet fears God for being able to cast him into hell. He knoweth he shall not be saved by nor for his good works, yet, he doth all the good works he can.

21. He knoweth God's providence is in all things, yet, is so diligent in his calling and business, as if he were to cut out the thread of his happiness. He believes before-hand that God hath purposed what he shall be, and that nothing can make him to alter his purpose; yet, prays and endeavours, as if he would force God to save him forever.

22. He prays and labours for that which he is confident God means to give; and the more assured he is, the more earnest he prays for that he knows he shall never obtain, and yet gives not over. He prays and labours for that which he knows he shall be no less happy without; he prays with all his heart not to be led into temptation, yet, rejoiceth when he is fallen into it; he believes his prayers are heard, even when they are denied, and gives thanks for that which he prays against.

23. He hath within him both flesh and spirit, yet, he is not a double-minded man; he is often led captive by the law of sin, yet, it never gets dominion over him; he cannot sin, yet can do nothing without sin. He doth nothing against his will, yet, maintains he doth what he would not. He wavers and doubteth, yet obtains.

24. He is often tossed and shaken, yet is as mount Sion; he is a serpent and a dove; a lamb and a lion; a reed and a cedar. He is sometimes so troubled, that he thinks nothing to be true in religion; yet, if he did think so, he could not at all be troubled. He thinks sometimes that God hath no mercy for him, yet resolves to die in the pursuit of it. He believes, like Abraham, against hope, and though he cannot answer God's logic, yet, with the woman of Canaan, he hopes to prevail with the rhetoric of importunity.

25. He wrestles, and yet prevails; and though yielding himself unworthy of the least blessing he enjoys, yet, Jacob-like, he will not let him go without a new blessing. He sometimes thinks himself to have no grace at all, and yet how poor and afflicted soever he be besides, he would not change conditions with the most prosperous man under heaven, that is a manifest worldling.

26 He thinks sometimes that the ordinances of God do him no good, yet, he would rather part with his life than be deprived of them.

27. He was born dead; yet so that it had been murder for any to have taken his life away. After he began to live, he was ever dying.

28. And though he hath an eternal life begun in him, yet he makes account he hath a death to pass through.

29. He counts self-murder a heinous sin, yet is ever busied in crucifying the flesh, and in putting to death his earthly members; not doubting but there will come a time of glory, when he shall be esteemed precious in the sight of the great God of heaven and earth, appearing with boldness at his throne, and asking any thing he needs; being endued with humility, by acknowledging his great crimes and offences, and that he deserveth nothing but severe punishment.

30. He believes his soul and body shall be as full of glory as them that have more; and no more full than theirs that have less.

31. He lives invisible to those that see him, and those that know him best do but guess at him; yet, those many times judge more truly of him than he doth of himself.

32. The world will sometimes account him a saint, when God accounteth him a hypocrite; and afterwards, when the world branded him for a hypocrite, then God owned him for a saint.

33. His death makes not an end of him. His soul which was put into his body, is not to be perfected without his body; yet, his soul is more happy when it is separated from his body, than when it was joined unto it: And his body, though torn in pieces, burnt to ashes, ground to powder, turned to rottenness, shall be no loser.

34. His advocate, his surety shall be his judge; his mortal part shall become immortal; and what was sown in corruption and defilement shall be raised in incorruption and glory; and a finite creature shall possess an infinite happiness. Glory be to God.

AN ADVERTISEMENT

TOUCHING THE

CONTROVERSIES OF THE CHURCH OF ENGLAND.

It is but ignorance, if any man find it strange, that the state of religion, especially in the days of peace, should be exercised and troubled with controversies: for as it is the condition of the church militant to be ever under trials, so it cometh to pass, that when the fiery trial of persecution ceaseth, there succeedeth another trial, which, as it were, by contrary blasts of doctrine, doth sift and winnow men's faith, and proveth

whether they know God aright; even as that other of afflictions discovereth whether they love him better than the world. Accordingly was it foretold by Christ, saying, "that in the latter times it should be said, Lo here, lo there is Christ:" which is to be understood, not as if the very person of Christ should be assumed and counterfeited, but his authority and pre-eminence, which is to be the truth itself, should be challenged and pretended. Thus have we read and seen to be fulfilled that which followeth, "Ecce in deserto, ecce in penetralibus:" while some have sought the truth in the conventicles and conciliables of heretics and sectaries; others in the external face and representation of the church; and both sorts have been seduced. Were it then that the controversies of the Church of England were such, as they did divide the unity of the spirit, and not only such as do unswathe her of her bands, the bands of peace, yet, could it be no occasion for any pretended Catholic to judge us, or for any irreligious person to despise us; or if it be, it shall but happen to us all as it hath used to do; to them to be hardened, and to us to endure the good pleasure of God. But now that our contentions are such, as we need not so much that general canon and sentence of Christ pronounced against heretics; "Erratis, nescientes Scripturas, et potestatem Dei;" you do err, not knowing the Scripture, and the power of God: as we need the admonition of St. James: "Let every man be swift to hear, slow to speak, slow to wrath;" and that the wound is no way dangerous, except we poison it with our remedies: as the former sort of men have less reason to make themselves music in our discord, so I have good hope that nothing shall displease ourselves, which shall be sincerely and modestly propounded for the appeasing of these dissensions. For if any shall be offended at this voice, "Vos estis fratres;" ye are brethren, why strive ye? he shall give a great presumption against himself, that he is the party that doth his brethren wrong.

The controversies themselves I will not enter into, as judging that the disease requireth rather rest than any other cure. Thus much we all know and confess, that they be not of the highest nature, for they are not touching the high mysteries of faith, such as detained the churches for many years after their first peace, what time the heretics moved curious questions, and made strange anatomies of the natures and person of Christ; and the Catholic fathers were compelled to follow them with all subtlety of decisions and determinations to exclude them from their evasions, and to take them in their labyrinths; so as it is rightly said, "illis temporibus, ingeniosa res fuit, esse Christianum." In those days it was an ingenious and subtle thing to be a Christian.

Neither are they concerning the great parts of the worship of God, of which it is true, that "non servatur unitas in credendo, nisi eadem adsit in colendo." There will be kept no unity in believing, except it be entertained in worshipping; such as were the controversies of the east and west churches touching images, and such as are many of those between the church of Rome and us; as about the adoration of the sacrament, and the like; but we contend about ceremonies and things indifferent; about the external policy and government of the church; in which kind, if we would but remember that the ancient and true bonds of unity are "one faith, one baptism," and not one ceremony, one policy. If we would observe the league amongst Christians, that is penned by our Saviour, "he that is not against us is with us;" if we could but comprehend that saying, "differentiæ rituum commendant unitatem doctrinæ;" the diversities of ceremonies do set forth the unity of doctrine; and that "habet religio quæ sunt æternitatis, habet quæ sunt temporis;" religion hath parts which belong to eternity, and parts which pertain to time; and if we did but know the virtue of silence and slowness to speak commended by St James, our controversies of themselves would close up and grow together; but most especially, if we would leave the overweaning and turbulent humours of these times, and revive the blessed proceeding of the apostles and fathers of the primitive church, which was, in the like and greater cases, not to enter into assertions and positions, but to deliver counsels and advices, we should need no other remedy at all: "si eadem consulis, frater, quæ affirmas, consulenti debetur reverentia, cum non debeatur fides affirmanti;" brother, if that which you set down as an assertion, you would deliver by way of advice, there were reverence due to your counsel, whereas faith is not due to your affirmation. St. Paul was content to speak thus, "Ego, non Dominus," I, and not the Lord: "Et secundum consilium meum;" according to my counsel. But now men do too lightly say, "Non ego, sed Dominus:" not I, but the Lord. Yea, and bind it with a heavy denunciation of his judgments, to terrify the simple, which have not sufficiently understood out of Solomon, that "the causeless curse shall not come."

Therefore, seeing the accidents are they which breed the peril, and not the things themselves in their own nature, it is meet the remedies be applied unto them, by opening what it is on either part, that keepeth the wound green, and formalizeth both sides to a farther opposition, and worketh an indisposition in men's minds to be reunited; wherein no accusation is pretended; but I find in reason, that peace is best built upon a repetition of wrongs: and in example, that the speeches which have been made by the wisest men, "de concordia ordinum," have not abstained from reducing to memory the extremities used on both parts: so as it is true which is said, "Qui pacem, tractat non repetitis conditionibus dissidii, is

magis animos hominum dulcedine pacis fallit, quam æquitate componit."

And first of all, it is more than time that there were an end and surcease made of this immodest and deformed manner of writing lately entertained, whereby matter of religion is handled in the style of the stage. Indeed, bitter and earnest writing must not hastily be condemned; for men cannot contend coldly, and without affection, about things which they hold dear and precious. A politic man may write from his brain without touch and sense of his heart; as in a speculation that appertaineth not unto him; but a feeling Christian will express in his words a character of zeal or love. The latter of which, as I could wish rather embraced, being more proper for these times; yet is the former warranted also by great examples.

But to leave all reverent and religious compassion towards evils, or indignation towards faults, and to turn religion into a comedy or satire; to search and rip up wounds with a laughing countenance; to intermix Scripture and scurrility, sometimes in one sentence, is a thing far from the devout reverence of a Christian, and scant beseeming the honest regard of a sober man. "Non est major confusio, quam serii et joci." There is no greater confusion than the confounding of jest and earnest. The majesty of religion, and the contempt and deformity of things ridiculous, are things as distant as things may be. Two principal causes have I ever known of atheism: curious controversies, and profane scoffing. Now that these two are joined in one, no doubt that sect will make no small progression.

And here I do much esteem the wisdom and religion of that bishop which replied to the first pamphlet of this kind, who remembered that a fool was to be answered, but not by becoming like unto him; and considered the matter which he handled, and not the person with whom he dealt.

Job, speaking of the majesty and gravity of a judge in himself, saith, "If I did smile, they believed it not:" as if he should have said, if I diverted, or glanced upon conceit of mirth, yet men's minds were so possessed with a reverence of the action in hand, as they could not receive it. Much more ought not this to be amongst bishops and divines disputing about holy things. And, therefore, as much do I mislike the invention of him who, as it seemeth, pleased himself in it as in no mean policy, that these men are to be dealt withal at their own weapons, and pledged in their own cup. This seemed to him as profound a device, as when the Cardinal Sansovino counselled Julius the Second to encounter the council of Pisa with the council of Lateran; or as lawful a challenge as Mr. Jewel made to confute the pretended Catholics by the Fathers: but those things will not excuse the imitation of evil in another. It should be contrariwise with us, as Cæsar said, "Nil malo, quam eos similes esse sui, et me mei." But now, "Dum de bonis contendimus, de malis consentimus;" while we differ about good things, we resemble in evil.

Surely, if I were asked of these men, who were the more to be blamed, I should percase remember the proverb, that the second blow maketh the fray, and the saying of an obscure fellow; "Qui replicat, multiplicat;" he that replieth, multiplieth. But I would determine the question with this sentence; "Alter principium malo dedit, alter modum abstulit;" by the one means we have a beginning, and by the other we shall have none end.

And, truly, as I do marvel that some of those preachers which call for reformation, whom I am far from wronging so far as to join them with these scoffers, do not publish some declaration, whereby they may satisfy the world, that they dislike their cause should be thus solicited; so I hope, assuredly, that my lords of the clergy have none intelligence with this interlibelling, but do altogether disallow that their credit should be thus defended. For, though I observe in one of them many glosses, whereby the man would insinuate himself into their favours, yet I find it to be ordinary, that many pressing and fawning persons do misconjecture of the humours of men in authority, and many times, "Veneri immolant suem," they seek to gratify them with that which they most dislike: for I have great reason to satisfy myself touching the judgment of my lords the bishops in this matter, by that which was written by one of them, which I mentioned before with honour. Nevertheless, I note, there is not an indifferent hand carried towards these pamphlets as they deserve; for the one sort flieth in the dark, and the other is uttered openly; wherein I might advise that side out of a wise writer, who hath set it down, that "punitis ingeniis gliscit auctoritas."

And, indeed, we see it ever falleth out, that the forbidden writing is always thought to be certain sparks of a truth that fly up into the faces of those that seek to choke it, and tread it out; whereas a book authorized is thought to be but "temporis voces," the language of the time. But in plain truth I do find, to mine understanding, these pamphlets as meet to be suppressed as the other. First, because, as the former sort doth deface the government of the church in the persons of the bishops and prelates, so the other doth lead into contempt the exercises of religion in the persons of sundry preachers; so as it disgraceth a higher matter, though in the meaner person.

Next, I find certain indiscreet and dangerous amplifications, as if the civil government itself of this state had near lost the force of her sinews, and were ready to enter into some convulsion, all things being full of faction and disorder; which is as unjustly acknowledged, as untruly affirmed. I know his meaning is to enforce this irreverent

and violent impugning of the government of bishops to be a suspected forerunner of a more general contempt. And I grant there is a sympathy between the estates; but no such matter in the civil policy, as deserveth so dishonourable a taxation.

To conclude this point: As it were to be wished that these writings had been abortive, and never seen the sun; so the next is, since they be come abroad, that they be censured, by all that have understanding and conscience, as the intemperate extravagances of some light persons. Yea, farther, that men beware, except they mean to adventure to deprive themselves of all sense of religion, and to pave their own hearts, and make them as the high way, how they may be conversant in them, and much more how they delight in that vein; but rather to turn their laughing into blushing, and to be ashamed, as of a short madness, that they have in matters of religion taken their disport and solace. But this, perchance, is of these faults which will be soonest acknowledged; though I perceive, nevertheless, that there want not some who seek to blanch and excuse it.

But to descend to a sincere view and consideration of the accidents and circumstances of these controversies, wherein either part deserveth blame or imputation, I find generally, in causes of church matters, that men do offend in some or all of these five points.

The first is, the giving occasion unto the controversies: and also the inconsiderate and ungrounded taking of occasion.

The next is, the extending and multiplying the controversies to a more general opposition or contradiction than appeareth at the first propounding of them, when men's judgments are least partial.

The third is, the passionate and unbrotherly practices and proceedings of both parts towards the persons each of others, for their discredit and suppression.

The fourth is, the courses holden and entertained on either side, for the drawing of their partisans to a more strait union within themselves, which ever importeth a farther distraction of the entire body.

The last is, the undue and inconvenient propounding, publishing, and debating of the controversies. In which point the most palpable error hath been already spoken of, as that which, through the strangeness and freshness of the abuse first offereth itself to the conceits of all men.

Now, concerning the occasion of the controversies, it cannot be denied, but that the imperfections in the conversation and government of those which have chief place in the church, have ever been principal causes and motives of schisms and divisions. For, whilst the bishops and governors of the church continue full of knowledge and good works, whilst they feed the flock indeed; whilst they deal with the secular states in all liberty and resolution, according to the majesty of their calling, and the precious care of souls imposed upon them, so long the church is "situated," as it were, "upon a hill;" no man maketh question of it, or seeketh to depart from it: but when these virtues in the fathers and leaders of the church have lost their light, and that they wax worldly, lovers of themselves, and pleasers of men, then men begin to grope for the church, as in the dark. They are in doubt whether they be the successors of the apostles, or of the Pharisees. Yea, howsoever they sit in Moses's chair, yet they can never speak, "tanquam auctoritatem habentes," as having authority, because they have lost their reputation in the consciences of men, by declining their steps from the way which they trace out to others; so as men had need continually have sounding in their ears this same "Nolite exire," go not out; so ready are they to depart from the church upon every voice; and therefore it is truly noted by one that writeth as a natural man, that the humility of the friars did, for a great time, maintain and bear out the irreligion of bishops and prelates.

For this is the double policy of the spiritual enemy, either by counterfeit holiness of life to establish and authorize errors; or by corruption of manners to discredit and draw in question truth and things lawful. This concerneth my lords the bishops, unto whom I am witness to myself, that I stand affected as I ought. No contradiction hath supplanted in me the reverence that I owe to their calling; neither hath any detraction or calumny imbased mine opinion of their persons. I know some of them, whose names are most pierced with these accusations, to be men of great virtues; although the indisposition of the times, and the want of correspondence many ways, is enough to frustrate the best endeavours in the edifying of the church. And for the rest, generally, I can condemn none. I am no judge of them that belong to so high a Master; neither have I "two witnesses." And I know it is truly said of fame, that

"Pariter facta, atque infecta canebat."

Their taxations arise not all from one coast; they have many and different enemies ready to invent slander, more ready to amplify it, and most ready to believe it. And "Magnes mendacii credulitas;" credulity is the adamant of lies. But if any be, against whom the Supreme Bishop hath not a few things, but many things; if any have lost his first love; if any be neither hot nor cold: if any have stumbled too fondly at the threshold, in such sort that he cannot sit well, that entered ill, it is time they return whence they are fallen, and confirm the things that remain.

Great is the weight of this fault: "Et eorum causa abhorrebant homines a sacrificio Domini;" and for their cause did men abhor the adoration

of God. But howsoever it be, those which have sought to deface them, and cast contempt upon them, are not to be excused.

It is the precept of Solomon, that the rulers be not reproached; no, not in our thought; but that we draw our very conceit into a modest interpretation of their doings. The holy angel would give no sentence of blasphemy against the common slanderer, but said, "Increpet te Dominus," the Lord rebuke thee. The Apostle St. Paul, though against him that did pollute sacred justice with tyrannous violence; did justly denounce the judgment of God, saying, "Percutiet te Dominus," the Lord will strike thee; yet in saying "paries dealbate," he thought he had gone too far, and retracted it; whereupon a learned father said, "ipsum quamvis inane nomen, et umbram sacerdotis expavit."

The ancient councils and synods, as is noted by the ecclesiastical story, when they deprived any bishop, never recorded the offence; but buried it in perpetual silence. Only Cham purchased his curse by revealing his father's disgrace; and yet a much greater fault is it to ascend from their person to their calling, and draw that in question. Many good fathers spake rigorously and severely of the unworthiness of bishops; as if presently it did forfeit, and cease their office. One saith "Sacerdotes nominamur, et non sumus," we are called priests, but priests we are not. Another saith, "Nisi bonum opus amplectaris, episcopus esse non potes;" except thou undertake the good work, thou canst not be a bishop; yet they meant nothing less than to move doubt of their calling or ordination.

The second occasion of controversies, is the nature and humour of some men. The church never wanteth a kind of persons, which love the salutation of Rabbi, master. Not in ceremony or compliment, but in an inward authority which they seek over men's minds, in drawing them to depend upon their opinions, and to seek knowledge at their lips. These men are the true successors of Diotrephes, the lover of pre-eminence, and not lord bishops. Such spirits do light upon another sort of natures, which do adhere to these men: "quorum gloria in obsequio;" stiff followers, and such as zeal marvellously for those whom they have chosen for their masters. This latter sort, for the most part, are men of young years, and superficial understanding, carried away with partial respect of persons, or with the enticing appearance of godly names and pretences: "Pauci res ipsas sequuntor, plures nomina rerum, plurimi nomina magistrorum;" few follow the things themselves, more the names of things, and most the names of their masters.

About these general affections are wreathed and interlaced accidental and private emulations and discontentments, all which together break forth into contentions: such as either violate truth, sobriety, or peace. These generalities apply themselves. The universities are the seat or the continent of this disease, whence it hath been, and is derived into the rest of the realm. There men will no longer be "e numero," of the number. There do others side themselves before they know their right hand from their left: so it is true which is said, "transeunt ab ignorantia ad præjudicium," they skip from ignorance to a prejudicate opinion, and never take a sound judgment in their way. But as it is well noted, "inter juvenile judicium et senile præjudicium, omnis veritas corrumpitur:" through want of years, when men are not indifferent, but partial, then their judgment is weak and unripe; and when it groweth to strength and ripeness, by that time it is forestalled with such a number of prejudicate opinions, as it is made unprofitable: so as between these two all truth is corrupted. In the mean while, the honourable names of sincerity, reformation, and discipline are put in the fore-ward: so as contentions and evil zeals cannot be touched, except these holy things be thought first to be violated. But howsoever they shall infer the solicitation for the peace of the church to proceed from the carnal sense, yet, I will conclude ever with the Apostle Paul, "Cum sit inter vos zelus et contentio, nonne carnales estis?" While there is amongst you zeal and contention, are ye not carnal? And howsoever they esteem the compounding of controversies to savour of man's wisdom and human policy, and think themselves led by the wisdom which is from above, yet I say, with St. James, "Non est ista sapientia de sursum descendens, sed terrena, animalis, diabolica: ubi enim zelus et contentio, ibi inconstantia et omne opus pravum." Of this inconstancy it is said by a learned father, "Procedere volunt non ad perfectionem, sed ad permutationem;" they seek to go forward still, not to perfection, but to change.

The third occasion of controversies I observe to be, an extreme and unlimited detestation of some former heresy or corruption of the church already acknowledged and convicted. This was the cause that produced the heresy of Arius, grounded especially upon detestation of Gentilism, lest the Christian should seem, by the assertion of the equal divinity of our Saviour Christ, to approach under the acknowledgment of more gods than one. The detestation of the heresy of Arius produced that of Sabellius; who, holding for execrable the dissimilitude which Arius pretended in the Trinity, fled so far from him, as he fell upon that other extremity, to deny the distinction of persons; and to say, they were but only names of several offices and dispensations. Yea, most of the heresies and schisms of the church have sprung up of this root; while men have made it as it were their scale, by which to measure the bounds of the most perfect religion; taking it by the farthest distance from the error last condemned.

These be "posthumi hæresium filii;" heresies that arise out of the ashes of other heresies that are extinct and amortised.

This manner of apprehension doth in some degree possess many in our times. They think it the true touchstone to try what is good and evil, by measuring what is more or less opposite to the institutions of the Church of Rome, be it ceremony, be it policy, or government; yea, be it other institutions of greater weight, that is ever most perfect which is removed most degrees from that church; and that is ever polluted and blemished, which participateth in any appearance with it. This is a subtile and dangerous conceit for men to entertain; apt to delude themselves, more apt to delude the people, and most apt of all to calumniate their adversaries. This surely, but that a notorious condemnation of that position was before our eyes, had long since brought us to the rebaptization of children baptized according to the pretended Catholic religion: for I see that which is a matter of much like reason, which is the reordaining of priests, is a matter already resolutely maintained. It is very meet that men beware how they be abused by this opinion; and that they know, that it is a consideration of much greater wisdom and sobriety to be well advised, whether in general demolition of the institutions of the Church of Rome, there were not, as men's actions are imperfect, some good purged with the bad, rather than to purge the church, as they pretend, every day anew; which is the way to make a wound in the bowels, as is already begun.

The fourth and last occasion of these controversies, a matter which did also trouble the church in former times, is the partial affectation and imitation of foreign churches. For many of our men, during the time of persecution, and since, having been conversant in churches abroad, and received a great impression of the form of government there ordained, have violently sought to intrude the same upon our church. But I answer, "Consentiamus in eo quod convenit, non in eo quod receptum est;" let us agree in this, that every church do that which is convenient for the state of itself, and not in particular customs. Although their churches had received the better form, yet, many times it is to be sought, "non quod optimum, sed e bonis quid proximum;" not that which is best, but of good things which is the best and readiest to be had. Our church is not now to plant; it is settled and established. It may be, in civil states, a republic is a better policy than a kingdom: yet, God forbid that lawful kingdoms should be tied to innovate and make alterations. "Qui mala introducit, voluntatem Dei oppugnat revelatam in verbo; qui nova introducit, voluntatem Dei oppugnat revelatam in rebus;" he that bringeth in evil customs, resisteth the will of God revealed in his word; he that bringeth in new things, resisteth the will of God revealed in the things themselves. "Consule providentiam Dei, cum verbo Dei;" take counsel of the providence of God, as well as of his word. Neither yet do I admit that their form, although it were possible and convenient, is better than ours, if some abuses were taken away. The parity and equality of ministers is a thing of wonderful great confusion, and so is an ordinary government by synods, which doth necessarily ensue upon the other.

It is hard in all causes, but especially in religion, when voices shall be numbered and not weighed: "Equidem," saith a wise father, "ut vere quod res est scribam, prorsus decrevi fugere omnem conventum episcoporum; nullius enim concilii bonum exitum unquam vidi; concilia enim non minuunt mala, sed augent potius." To say the truth, I am utterly determined never to come to any council of bishops: for I never yet saw good end of any council; for councils abate not ill things, but rather increase them. Which is to be understood not so much of general councils, as of synods, gathered for the ordinary government of the church. As for the deprivation of bishops, and such like causes, this mischief hath taught the use of archbishops, patriarchs, and primates; as the abuse of them since hath taught men to mislike them.

But it will be said, Look to the fruits of the churches abroad and ours. To which I say, that I beseech the Lord to multiply his blessings and graces upon those churches a hundred fold. But yet it is not good, that we fall on the numbering of them; it may be our peace hath made us more wanton: it may be also, though I would be loath to derogate from the honour of those churches, were it not to remove scandals, that their fruits are as torches in the dark, which appear greatest afar off. I know they may have some strict orders for the repressing of sundry excesses: but when I consider of the censures of some persons, as well upon particular men as upon churches, I think on the saying of a Platonist, who saith, "Certe vitia irascibilis partis animæ sunt gradu praviora, quam concupiscibilis, tametsi occultiora;" a matter that appeared much by the ancient contentions of bishops. God grant that we may contend with other churches, as the vine with the olive, which of us shall bear the first fruit; and not as the brier with the thistle, which of us is most unprofitable. And thus much touching the occasions of these controversies.

Now, briefly to set down the growth and progression of the controversies; whereby will be verified the saying of Solomon, that "the course of contention is to be stopped at the first; being else as the waters, which, if they gain a breach, it will hardly ever be recovered.

It may be remembered, that on that part, which calls for reformation, was first propounded some dislike of certain ceremonies supposed to be superstitious; some complaint of dumb ministers who

possess rich benefices; and some invectives against the idle and monastical continuance within the universities, by those who had livings to be resident upon; and such like abuses. Thence they went on to condemn the government of bishops as a hierarchy remaining to us of the corruptions of the Roman church, and to except to sundry institutions in the church, as not sufficiently delivered from the pollutions of former times. And, lastly, they are advanced to define of an only and perpetual form of policy in the church; which, without consideration of possibility, and foresight of peril, and perturbation of the church and state, must be erected and planted by the magistrate. Here they stay. Others, not able to keep footing in so steep ground, descend farther; That the same must be entered into and accepted of the people, at their peril, without the attending of the establishment of authority. And so in the mean time they refuse to communicate with us, reputing us to have no church. This has been the progression of that side: I mean of the generality. For, I know, some persons being of the nature, not only to love extremities, but also to fall to them without degrees, were at the highest strain at the first.

The other part, which maintaineth the present government of the church, hath not kept one tenor neither. First, those ceremonies which were pretended to be corrupt, they maintained to be things indifferent, and opposed the examples of the good times of the church to that challenge which was made unto them, because they were used in the later superstitious times. Then were they also content mildly to acknowledge many imperfections in the church: as tares come up amongst the corn: which yet, according to the wisdom taught by our Saviour, were not with strife to be pulled up, lest it might spoil and supplant the good corn, but to grow on together till the harvest. After, they grew to a more absolute defence and maintenance of all the orders of the church, and stiffly to hold, that nothing was to be innovated; partly because it needed not, partly because it would make a breach upon the rest. Hence, exasperated through contentions, they are fallen to a direct condemnation of the contrary part, as of a sect. Yea, and some indiscreet persons have been bold in open preaching to use dishonourable and derogatory speech and censure of the churches abroad; and that so far, as some of our men, as I have heard, ordained in foreign parts, have been pronounced to be no lawful ministers. Thus we see the beginnings were modest, but the extremes are violent; so as there is almost as great a distance now of either side from itself, as was at the first of one from the other. And, surely, though my meaning and scope be not, as I said before, to enter into the controversies themselves, yet I do admonish the maintainers of the alone discipline, to weigh and consider seriously and attentively, how near they are unto them, with whom, I know, they will not join. It is very hard to affirm, that the discipline, which they say we want, is one of the essential parts of the worship of God; and not to affirm withal, that the people themselves, upon peril of salvation, without staying for the magistrate, are to gather themselves into it. I demand, if a civil state receive the preaching of the word and baptism, and interdict and exclude the sacrament of the Lord's Supper, were not men bound upon danger of their souls to draw themselves to congregations, wherein they might celebrate this mystery, and not to content themselves with that part of God's worship which the magistrate had authorized? This I speak, not to draw them into the mislike of others, but into a more deep consideration of themselves: "Fortasse non redeunt quia suum progressum non intelligunt."

Again, to my lords the bishops I say, that it is hard for them to avoid blame, in the opinion of an indifferent person, in standing so precisely upon altering nothing; "leges, novis legibus non recreatæ, acescunt;" laws, not refreshed with new laws, wax sour. "Qui mala non permutat, in bonis non perseverat;" without change of ill, a man cannot continue the good. To take away many abuses, supplanteth not good orders, but establisheth them. "Morosa moris retentio, res turbulenta est, æque ac novitas;" a contentious retaining of custom is a turbulent thing, as well as innovation. A good husband is ever pruning in his vineyard or his field; not unseasonably, indeed, not unskilfully, but lightly; he findeth ever somewhat to do. We have heard of no offers of the bishops of bills in parliament; which, no doubt, proceeding from them to whom it properly belongeth, would have everywhere received acceptation. Their own constitutions and orders have reformed them little. Is nothing amiss? Can any man defend the use of excommunication as a base process to lackey up and down for duties and fees; it being a precursory judgment of the latter day?

Is there no mean to train and nurse up ministers, for the yield of the universities will not serve, though they were never so well governed; to train them, I say, not to preach, for that every man confidently adventureth to do, but to preach soundly, and to handle the Scriptures with wisdom and judgment? I know prophesying was subject to great abuse, and would be more abused now; because heat of contentions is increased: but I say the only reason of the abuse was, because there was admitted to it a popular auditory; and it was not contained within a private conference of ministers. Other things might be spoken of. I pray God to inspire the bishops with a fervent love and care of the people; and that they may not so much urge things in controversy, as

things out of controversy, which all men confess to be gracious and good. And thus much for the second point.

Now, as to the third point, of unbrotherly proceeding on either part, it is directly contrary to my purpose to amplify wrongs: it is enough to note and number them; which I do also, to move compassion and remorse on the offending side, and not to animate challengers and complaints on the other. And this point, as reason is, doth chiefly touch that side which can do most: "Injuriæ potentiorum sunt;" injuries come from them that have the upper hand.

The wrongs of them which are possessed of the government of the church towards the other, may hardly be dissembled or excused: they have charged them as though they denied tribute to Cæsar, and withdrew from the civil magistrate the obedience which they have ever performed and taught. They have sorted and coupled them with the "family of love," whose heresies they have laboured to destroy and confute. They have been swift of credit to receive accusations against them, from those that have quarrelled with them, but for speaking against sin and vice. Their accusations and inquisitions have been strict, swearing men to blanks and generalities, not included within compass of matter certain, which the party which is to take the oath may comprehend, which is a thing captious and strainable. Their urging of subscription to their own articles, is but "lacessere, et irritare morbos Ecclesiæ," which otherwise would spend and exercise themselves. "Non consensum quærit sed dissidium, qui, quod factis præstatur, in verbis exigit:" He seeketh not unity, but division, which exacteth that in words, which men are content to yield in action. And it is true, there are some which, as I am persuaded, will not easily offend by inconformity, who, notwithstanding, make some conscience to subscribe; for they know this note of inconstancy and defection from that which they have long held, shall disable them to do that good which otherwise they might do: for such is the weakness of many, that their ministry should be thereby discredited. As for their easy silencing of them, in such great scarcity of preachers, it is to punish the people, and not them. Ought they not, I mean the bishops, to keep one eye open, to look upon the good that those men do, not to fix them both upon the hurt that they suppose cometh by them? Indeed, such as are intemperate and incorrigible, God forbid they should be permitted to preach: but shall every inconsiderate word, sometimes captiously watched, and for the most part hardly enforced, be as a forfeiture of their voice and gift in preaching? As for sundry particular molestations, I take no pleasure to recite them. If a minister shall be troubled for saying in baptism, "do you believe?" for, "dost thou believe?" If another shall be called in question for praying for her majesty, without the additions of her style; whereas the very form of prayer in the book of Common-Prayer hath, "Thy servant Elizabeth," and no more: If a third shall be accused, upon these words uttered touching the controversies, "tollatur lex, et fiat certamen," whereby was meant, that the prejudice of the law removed, either reasons should be equally compared, of calling the people to sedition and mutiny, as if he had said, away with the law, and try it out with force: If these and other like particulars be true, which I have but by rumour, and cannot affirm; it is to be lamented that they should labour amongst us with so little comfort. I know restrained governments are better than remiss; and I am of his mind that said, Better is it to live where nothing is lawful, than where all things are lawful. I dislike that laws should not be continued, or disturbers be unpunished: but laws are likened to the grape, that being too much pressed yields a hard and unwholesome wine. Of these things I must say; "Ira viri non operatur justitiam Dei;" the wrath of men worketh not the righteousness of God.

As for the injuries of the other part, they be "ictus inermes;" as it were headless arrows; they be fiery and eager invectives, and, in some fond men, uncivil and irreverent behaviour towards their superiors. This last invention also, which exposeth them to derision and obloquy by libels, chargeth not, as I am persuaded, the whole side: neither doth that other, which is yet more odious, practised by the worst sort of them; which is, to call in, as it were to their aids, certain mercenary bands, which impugn bishops, and other ecclesiastical dignities, to have the spoil of their endowments and livings: of these I cannot speak too hardly. It is an intelligence between incendiaries and robbers, the one to fire the house, the other to rifle it.

The fourth point wholly pertaineth to them which impugn the present ecclesiastical government; who, although they have not cut themselves off from the body and communion of the church, yet do they affect certain cognisances and differences, wherein they seek to correspond amongst themselves, and to be separate from others. And it is truly said, "tam sunt mores quidam schismatici, quam dogmata schismatica;" there be as well schismatical fashions as opinions. First, they have impropriated unto themselves the names of zealous, sincere, and reformed; as if all others were cold minglers of holy things and profane, and friends of abuses. Yea, be a man endued with great virtues, and fruitful in good works; yet, if he concur not with them, they term him, in derogation, a civil and moral man, and compare him to Socrates, or some heathen philosopher: whereas the wisdom of the Scriptures teacheth us otherwise; namely, to judge and denominate men religious according to their works of the second table; because they of the first are often counterfeit, and practised in

hypocrisy. So St. John saith, that "a man doth vainly boast of loving God, whom he never saw, if he love not his brother whom he hath seen." And St. James saith, "This is true religion, to visit the fatherless and the widow." So as that which is with them but philosophical and moral, is, in the apostle's phrase, "true religion and Christianity." As in affection they challenge the said virtues of zeal and the rest; so in knowledge they attribute unto themselves light and perfection. They say, the Church of England in King Edward's time, and in the beginning of her majesty's reign, was but in the cradle; and the bishops in those times did somewhat grope for daybreak, but that maturity and fulness of light proceedeth from themselves. So Sabinius, bishop of Heraclea, a Macedonian heretic, said, that the fathers in the council of Nice were but infants and ignorant men: that the church was not so perfect in their decrees as to refuse that farther ripeness of knowledge which time had revealed. And as they censure virtuous men by the names of civil and moral, so do they censure men truly and godly wise, who see into the vanity of their affections, by the name of politics; saying, that their wisdom is but carnal and savouring of man's brain. So, likewise, if a preacher preach with care and meditation, I speak not of the vain scholastical manner of preaching, but soundly indeed, ordering the matter he handleth distinctly for memory, deducting and drawing it down for direction, and authorizing it with strong proofs and warrants, they censure it as a form of speaking not becoming the simplicity of the gospel, and refer it to the reprehension of St. Paul, speaking of the "enticing speech of man's wisdom."

Now for their own manner of preaching, what is it? Surely they exhort well, and work compunction of mind, and bring men well to the question, "Viri, fratres, quid faciemus?" But that is not enough, except they resolve the question. They handle matters of controversy weakly and "obiter," and as before a people that will accept of any thing. In doctrine of manners there is little but generality and repetition. The word, the bread of life, they toss up and down, they break it not: they draw not their directions down "ad casus conscientiæ;" that a man may be warranted in his particular actions, whether they be lawful or not; neither indeed are many of them able to do it, what through want of grounded knowledge, what through want of study and time. It is a compendious and easy thing to call for the observation of the Sabbath-day, or to speak against unlawful gain; but what actions and works may be done upon the Sabbath, and what not; and what courses of gain are lawful, and in what cases: to set this down, and to clear the whole matter with good distinctions and decisions, is a matter of great knowledge and labour, and asketh much meditation and conversing in the Scriptures, and other helps which God hath provided and preserved for instruction.

Again, they carry not an equal hand in teaching the people their lawful liberty, as well as their restraints and prohibitions: but they think a man cannot go too far in that that hath a show of a commandment.

They forget that there are sins on the right hand, as well as on the left; and that the word is double-edged, and cutteth on both sides, as well the profane transgressions as the superstitious observances. Who doubteth but that it is as unlawful to shut where God hath opened, as to open where God hath shut; to bind where God hath loosed, as to loose where God hath bound? Amongst men it is commonly as ill taken to turn back favours, as to disobey commandments. In this kind of zeal, for example, they have pronounced generally, and without difference, all untruths unlawful; notwithstanding, that the midwives are directly reported to have been blessed for their excuse; and Rahab is said by faith to have concealed the spies; and Solomon's selected judgment proceeded upon a simulation; and our Saviour, the more to touch the hearts of the two disciples with a holy dalliance, made as if he would have passed Emmaus. Farther, I have heard some sermons of mortification, which, I think, with very good meaning, they have preached out of their own experience and exercise, and things in private counsels not unmeet; but surely no sound conceits, much like to Parsons' "Resolution," or not so good; apt to breed in men rather weak opinions and perplexed despairs, than filial and true repentance which is sought.

Another point of great inconvenience and peril, is to entitle the people to hear controversies, and all kinds of doctrine. They say no part of the counsel of God is to be suppressed, nor the people defrauded: so as the difference which the apostle maketh between milk and strong meat is confounded: and his precept, that the weak be not admitted unto questions and controversies, taketh no place.

But most of all is to be suspected, as a seed of farther inconvenience, their manner of handling the Scriptures; for whilst they seek express Scripture for every thing; and that they have, in a manner, deprived themselves and the church of a special help and support, by embasing the authority of the fathers, they resort to naked examples, conceited inferences, and forced allusions, such as do mine into all certainty of religion.

Another extremity is the excessive magnifying of that which, though it be a principal and most holy institution, yet hath its limits, as all things else have. We see wheresoever, in a manner, they find in the Scriptures the word spoken of, they expound it of preaching; they have made it, in a manner, of the essence of the sacrament of the Lord's Supper, to have a sermon precedent;

they have, in a sort, annihilated the use of liturgies, and forms of divine service, although the house of God be denominated of the principal, "domus orationis," a house of prayer, and not a house of preaching. As for the life of the good monks and hermits in the primitive church, I know, they will condemn a man as half a papist, if he should maintain them as other than profane, because they heard no sermons. In the mean time, what preaching is, and who may be said to preach, they move no question; but, as far as I see, every man that presumeth to speak in chair is accounted a preacher. But I am assured, that not a few that call hotly for a preaching ministry, deserve to be the first themselves that should be expelled. All which errors and misproceedings they do fortify and intrench by an addicted respect to their own opinions, and an impatience to hear contradiction or argument; yea, I know some of them that would think it a tempting of God, to hear or read what may be said against them; as if there could be a "quod bonum est, tenete;" without an "omnia probate," going before.

This may suffice to offer unto themselves a thought and consideration, whether in these things they do well or no? and to correct and assuage the partiality of their followers. For as for any man that shall hereby enter into a contempt of their ministry, it is but his own hardness of heart. I know the work of exhortation doth chiefly rest upon these men, and they have zeal and hate of sin: But, again, let them take heed that it be not true which one of their adversaries said, that they have but two small wants, knowledge, and love. And so I conclude this point.

The last point, touching the due publishing and debating of these controversies, needeth no long speech. This strange abuse of antiques and pasquils hath been touched before: so, likewise, I repeat that which I said, that a character of love is more proper for debates of this nature, than that of zeal. As for all direct or indirect glances, or levels at men's persons, they were ever in these causes disallowed.

Lastly, whatsoever be pretended, the people is no meet arbitrator, but rather the quiet, modest, and private assemblies, and conferences of the learned. "Qui apud incapacem loquitur, non disceptat, sed calumniatur." The press and pulpit would be freed and discharged of these contentions; neither promotion on the one side, nor glory and heat on the other side, ought to continue those challenges and cartels at the cross and other places; but rather all preachers, especially such as be of good temper, and have wisdom with conscience, ought to inculcate and beat upon a peace, silence, and surseance. Neither let them fear Solon's law, which compelled in factions every particular person to range himself on the one side; nor yet the fond calumny of neutrality; but let them know that is true which is said by a wise man, That neuters in contentions are neither better or worse than either side.

These things have I in all sincerity and simplicity set down touching the controversies which now trouble the Church of England; and that without all art and insinuation, and therefore not like to be grateful to either part: Notwithstanding, I trust what hath been said shall find a correspondence in their minds which are not embarked in partiality, and which love the whole better than a part; wherefore I am not out of hope that it may do good; at the least I shall not repent myself of the meditation.

CERTAIN CONSIDERATIONS

TOUCHING

THE BETTER PACIFICATION AND EDIFICATION

OF THE

CHURCH OF ENGLAND.

DEDICATED TO HIS MOST EXCELLENT MAJESTY.

The unity of your church, excellent sovereign, is a thing no less precious than the union of your kingdoms; being both works wherein your happiness may contend with your worthiness. Having therefore presumed, not without your majesty's gracious acceptation, to say somewhat on the one, I am the more encouraged not to be silent in the other: the rather, because it is an argument that I have travelled in heretofore.* But Solomon commendeth a word spoken in season; and as our Saviour, speaking of the discerning of seasons, saith, "When you see a cloud rising in the west, you say it will be a shower:" so your majesty's rising to this monarchy in the west parts of the world, doth promise a sweet and fruitful shower of many blessings upon this church and commonwealth; a shower of that influence as the very first dews and drops thereof have already laid the storms and winds throughout Christendom; reducing the very face of Europe to a more peaceable and amiable countenance. But to the purpose.

It is very true, that these ecclesiastical matters are things not properly appertaining to my profession; which I was not so inconsiderate but to object to myself: but finding that it is many times seen that a man that standeth off, and somewhat removed from a plot of ground, doth better survey it and discover it than those which

* Vide page 411.

are upon it, I thought it not impossible, but that I, as a looker on, might cast mine eyes upon some things which the actors themselves, especially some being interested, some led and addicted, some declared and engaged, did not or would not see. And that knowing in my conscience, whereto God beareth witness, that the things which I shall speak spring out of no vein of popularity, ostentation, desire of novelty, partiality to either side, disposition to intermeddle, or any the like leaven; I may conceive hope, that what I want in depth of judgment may be countervailed in simplicity and sincerity of affection. But of all things this did most animate me; that I found in these opinions of mine, which I have long held and embraced, as may appear by that which I have many years since written of them, according to the proportion, nevertheless, of my weakness, a consent and conformity with that which your majesty hath published of your own most Christian, most wise, and moderate sense, in these causes; wherein you have well expressed to the world, that there is infused in your sacred breast, from God, that high principle and position of government, That you ever hold the whole more dear than any part.

For who seeth not that many are affected, and give opinion in these matters, as if they had not so much a desire to purge the evil from the good, as to countenance and protect the evil by the good. Others speak as if their scope were only to set forth what is good, and not to seek what is possible, which is to wish, and not to propound. Others proceed as if they had rather a mind of removing, than of reforming. But howsoever either side, as men, though excellent men, shall run into extremities; yet your majesty, as a most wise, equal, and Christian moderator, is disposed to find out the golden mediocrity in the establishment of that which is sound, and in the reparation of that which is corrupt and decayed. To your princely judgment then I do in all humbleness submit whatsoever I shall propound, offering the same but as a mite into the treasury of your wisdom. For as the astronomers do well observe, that when three of the superior lights do meet in conjunction, it bringeth forth some admirable effects: so there being joined in your majesty the light of nature, the light of learning, and, above all, the light of God's Holy Spirit; it cannot be but your government must be as a happy constellation over the states of your kingdoms. Neither is there wanting to your majesty that fourth light, which, though it be but a borrowed light, yet is of singular efficacy and moment added to the rest, which, is the light of a most wise and well compounded council; to whose honourable and grave wisdoms I do likewise submit whatsoever I shall speak, hoping that I shall not need to make protestation of my mind and opinion: That, until your majesty doth otherwise determine and order, all actual and full obedience is to be given to ecclesiastical jurisdiction as it now standeth: and, when your majesty hath determined and ordered, that every good subject ought to rest satisfied, and apply his obedience to your majesty's laws, ordinances, and royal commandments; nor of the dislike I have of all immodest bitterness, peremptory presumption, popular handling, and other courses, tending rather to rumour and impression in the vulgar sort than to likelihood of effect joined with observation of duty.

But before I enter into the points controverted, I think good to remove, if it may be, two opinions, which directly confront and oppone to reformation: the one bringing it to a nullity, and the other to an impossibility. The first is, that it is against good policy to innovate any thing in church matters; the other, that all reformation must be after one platform.

For the first of these, it is excellently said by the prophet, "State super vias antiquas, et videte, quænam sit via recta et vera, et ambulate in ea." For it is true, that with all wise and moderate persons, custom and usage obtaineth that reverence, as it is sufficient matter to move them to make a stand, and to discover, and take a view; but it is no warrant to guide and conduct them. A just ground, I say, it is of deliberation, but not of direction. But, on the other side, who knoweth not, that time is truly compared to a stream, that carrieth down fresh and pure waters into that salt sea of corruption which environeth all human actions? and, therefore, if man shall not by his industry, virtue, and policy, as it were with the oar, row against the stream and inclination of time, all institutions and ordinances, be they never so pure, will corrupt and degenerate. But not to handle this matter commonplace like, I would only ask, why the civil state should be purged and restored by good and wholesome laws, made every third or fourth year in parliament assembled: devising remedies as fast as time breedeth mischief: and, contrariwise, the ecclesiastical state should still continue upon the dregs of time, and receive no alteration now for these five-and-forty years and more? If any man shall object, that if the like intermission had been used in civil causes also, the error had not been great; surely the wisdom of the kingdom hath been otherwise in experience for three hundred years' space at the least. But if it be said to me that there is a difference between civil causes and ecclesiastical, they may as well tell me that churches and chapels need no reparations, though castles and houses do; whereas, commonly, to speak the truth, dilapidations of the inward and spiritual edifications of the church of God are in all times as great as the outward and material. Sure I am that the very word and style of reformation used by our Saviour, "ab initio non fuit

sic," was applied to church matters, and those of the highest nature, concerning the law moral.

Nevertheless, he were both unthankful and unwise, that would deny but that the Church of England, during the time of Queen Elizabeth, of famous memory, did flourish. If I should compare it with foreign churches, I would rather the comparison should be in the virtues, than as some make it, in the defects. Rather, I say, as between the vine and the olive, which should be most fruitful; and not as between the brier and the thistle, which should be most unprofitable. For that reverence should be used to the church, which the good sons of Noah used to their father's nakedness; that is, as it were to go backwards, and to help the defects thereof, and yet to dissemble them. And it is to be acknowledged, that scarcely any church, since the primitive church, yielded in like number of years and latitude of country, a greater number of excellent preachers, famous writers, and grave governors. But for the discipline and orders of the church, as many, and the chiefest of them, are holy and good; so yet, if St. John were to indite an epistle to the Church of England, as he did to them of Asia, it would sure have the clause, "habeo adversus te pauca." And no more for this point, saving, that as an appendix thereto it is not amiss to touch that objection, which is made to the time, and not to the matter; pretending, that if reformation were necessary, yet it were not now seasonable at your majesty's first entrance: yet Hippocrates saith, "Si quid moves, a principio move;" and the wisdom of all examples do show, that the wisest princes, as they have ever been the most sparing in removing or alteration of servants and officers upon their coming in; so for removing of abuses and enormities, and for reforming of laws and the policy of their states, they have chiefly sought to ennoble and commend their beginnings therewith; knowing that the first impression with people continueth long, and when men's minds are most in expectation and suspense, then are they best wrought and managed. And, therefore, it seemeth to me that as the spring of nature, I mean the spring of the year, is the best time for purging and medicining the natural body, so the spring of kingdoms is the most proper season for the purging and rectifying of politic bodies.

There remaineth yet an objection, rather of suspicion than of reason; and yet such as I think maketh a great impression in the minds of very wise and well-affected persons; which is, that if way be given to mutation, though it be in taking away abuses, yet it may so acquaint men with sweetness of change, as it will undermine the stability even of that which is sound and good. This surely had been a good and true allegation in the ancient contentions and divisions between the people and the senate of Rome; where things were carried at the appetites of multitudes, which can never keep within the compass of any moderation: but these things being with us to have an orderly passage, under a king who hath a royal power and approved judgment, and knoweth as well the measure of things as the nature of them; it is surely a needless fear. For they need not doubt but your majesty, with the advice of your council, will discern what things are intermingled like the tares amongst the wheat, which have their roots so enwrapped and entangled, as the one cannot be pulled up without endangering the other; and what are mingled but as the chaff and the corn, which need but a fan to sift and sever them. So much, therefore, for the first point, of no reformation to be admitted at all.

For the second point, that there should be but one form of discipline in all churches, and that imposed by necessity of a commandment and prescript out of the word of God; it is a matter volumes have been compiled of, and therefore cannot receive a brief redargution. I for my part do confess, that in revolving the Scriptures I could never find any such thing: but that God had left the like liberty to the church government, as he had done to the civil government; to be varied according to time, and place, and accidents, which nevertheless his high and divine providence doth order and dispose. For all civil governments are restrained from God unto the general grounds of justice and manners; but the policies and forms of them are left free: so that monarchies and kingdoms, senates and seignories, popular states, and communalities, are lawful, and where they are planted ought to be maintained inviolate.

So, likewise, in church matters, the substance of doctrine is immutable; and so are the general rules of government: but for rites and ceremonies, and for the particular hierarchies, policies, and disciplines of churches, they be left at large. And, therefore, it is good we return unto the ancient bounds of unity in the church of God; which was, one faith, one baptism; and not one hierarchy, one discipline; and that we observe the league of Christians, as it is penned by our Saviour; which is in substance of doctrine this: "He that is not with us, is against us:" but in things indifferent, and but of circumstance this; "He that is not against us, is with us." In these things, so as the general rules be observed; that Christ's flock be fed; that there be a succession in bishops and ministers, which are the prophets of the New Testament; that there be a due and reverent use of the power of the keys; that those that preach the gospel, live of the gospel; that all things tend to edification; that all things be done in order and with decency, and the like: the rest is left to the holy wisdom and spiritual discretion of the master builders and inferior builders in Christ's church; as it is excellently alluded by that father that noted, that Christ's garment was without seam; and yet the church's

garment was of divers colours: and thereupon setteth down for a rule; "in veste varietas sit, scissura non sit."

In which variety, nevertheless, it is a safe and wise course to follow good examples and precedents; but then by the rule of imitation and example to consider not only which are best, but which are the likeliest; as, namely, the government of the church in the purest times of the first good emperors that embraced the faith. For the times of persecution, before temporal princes received our faith, as they were excellent times for doctrine and manners, so they be improper and unlike examples of outward government and policy. And so much for this point: now to the particular points of controversies, or rather of reformation.

CIRCUMSTANCES IN THE GOVERNMENT OF BISHOPS.

First, therefore, for the government of bishops, I, for my part, not prejudging the precedents of other reformed churches, do hold it warranted by the word of God, and by the practice of the ancient church in the better times, and much more convenient for kingdoms, than parity of ministers and government by synods. But then, farther, it is to be considered, that the church is not now to plant or build; but only to be pruned from corruption, and to be repaired and restored in some decays.

For it is worth the noting, that the Scripture saith, "Translato sacerdotio, necesse est ut et legis fiat translatio." It is not possible, in respect of the great and near sympathy between the state civil and the state ecclesiastical, to make so main an alteration in the church, but it would have a perilous operation upon the kingdoms; and, therefore, it is fit that controversy be in peace and silence.

But there be two circumstances in the administration of bishops, wherein, I confess, I could never be satisfied; the one, the sole exercise of their authority; the other, the deputation of their authority.

For the first, the bishop giveth orders alone, excommunicateth alone, judgeth alone. This seemeth to be a thing almost without example in good government, and therefore not unlikely to have crept in in the degenerate and corrupt times. We see the greatest kings and monarchs have their councils. There is no temporal court in England of the higher sort where the authority doth rest in one person. The king's bench, common-pleas, and the exchequer, are benches of a certain number of judges. The Chancellor of England hath an assistance of twelve masters of the chancery. The master of the wards hath a council of the court; so hath the chancellor of the duchy. In the Exchequer Chamber, the lord treasurer is joined with the chancellor and the barons. The masters of the requests are ever more than one. The justices of assize are two. The lord presidents in the North and in Wales have councils of divers. The Star Chamber is an assembly of the king's privy council, aspersed with the lords spiritual and temporal: so as in courts the principal person hath ever either colleagues or assessors.

The like is to be found in other well-governed commonwealths abroad, where the jurisdiction is yet more dispersed; as in the court of parliament of France, and in other places. No man will deny but the acts that pass the bishop's jurisdiction are of as great importance as those that pass the civil courts: for men's souls are more precious than their bodies or goods; and so are their good names. Bishops have their infirmities, and have no exception from that general malediction which is pronounced against all men living, "Væ soli, nam si occideret, &c." Nay, we see that the first warrant in spiritual causes is directed to a number, "Dic Ecclesiæ;" which is not so in temporal matters: and we see that in general causes of church government, there are as well assemblies of all the clergy in councils, as of all the states in parliament. Whence should this sole exercise of jurisdiction come? Surely, I do suppose, and, I think, upon good ground, that "ab initio non fuit ita;" and that the deans and chapters were councils about the sees and chairs of bishops at the first, and were unto them a presbytery or consistory; and intermeddled not only in the disposing of their revenues and endowments, but much more in jurisdiction ecclesiastical. But it is probable, that the deans and chapters stuck close to the bishops in matters of profit and the world, and would not lose their hold; but in matters of jurisdiction, which they accounted but trouble and attendance, they suffered the bishops to encroach and usurp; and so the one continueth, and the other is lost. And we see that the Bishop of Rome, "fas enim et ab hoste doceri," and no question in that church the first institutions were excellent, performeth all ecclesiastical jurisdiction as in consistory.

And whereof consisteth this consistory, but of the parish priests of Rome, which term themselves cardinals, "a cardinibus mundi;" because the bishop pretendeth to be universal over the whole world? And hereof again we see many shadows yet remaining: as, that the dean and chapter, "pro forma," chooseth the bishop, which is the highest point of jurisdiction: and that the bishop, when he giveth orders, if there be any ministers casually present, calleth them to join with him in imposition of hands, and some other particulars. And, therefore, it seemeth to me a thing reasonable and religious, and according to the first institution, that bishops, in the greatest

causes, and those which require a spiritual discerning, namely, in ordaining, suspending, or depriving ministers, in excommunication, being restored to the true and proper use, as shall be afterwards touched, in sentencing the validity of marriages and legitimations, in judging causes criminous, as simony, incest, blasphemy, and the like, should not proceed sole and unassisted: which point, as I understand it, is a reformation that may be planted "sine strepitu," without any perturbation at all: and is a matter which will give strength to the bishops, countenance to the inferior degrees of prelates or ministers, and the better issue or proceeding to those causes that shall pass.

And as I wish this strength given to the bishops by council, so it is not unworthy your majesty's consideration, whether you shall not think fit to give strength to the general council of your clergy, the convocation house, which was then restrained when the state of the clergy was thought a suspected part of the kingdom, in regard of their late homage to the bishop of Rome; which state now will give place to none in their loyalty and devotion to your majesty.

For the second point, which is the deputation of their authority, I see no perfect and sure ground for that neither, being somewhat different from the examples and rules of government. The bishop exerciseth his jurisdiction by his chancellor and commissary official, &c. We see in all laws in the world, offices of confidence and skill cannot be put over, nor exercised by deputy, except it be especially contained in the original grant: and in that case it is dutiful. And for experience, there was never any Chancellor of England made a deputy; there was never any judge in any court made a deputy. The bishop is a judge and of a high nature: whence cometh it that he should depute, considering that all trust and confidence, as was said, is personal and inherent; and cannot, nor ought not to be transposed? Surely, in this, again, "ab initio non fuit sic:" but it is probable that bishops when they gave themselves too much to the glory of the world, and became grandees in kingdoms, and great counsellors to princes, then did they delegate their proper jurisdictions, as things of too inferior a nature for their greatness: and then, after the similitude and imitation of kings and counts palatine, they would have their chancellors and judges.

But that example of kings and potentates giveth no good defence. For the reasons why kings administer by their judges, although themselves are supreme judges, are two: the one, because the offices of kings are for the most part of inheritance; and it is a rule in all laws, that offices of inheritance are rather matters that ground in interest than in confidence: for as much as they may fall upon women, upon infants, upon lunatics and idiots, persons incapable to execute the judicature in person; and therefore such offices by all laws might ever be exercised and administered by delegation. The second reason is, because of the amplitude of their jurisdiction; which is as great as either their birthright from their ancestors, or their swordright from God maketh it. And therefore if Moses, that was governor over no great people, and those collected together in a camp, and not scattered in provinces and cities, himself of an extraordinary spirit, was nevertheless not able to suffice and hold out in person to judge the people, but did, by the advice of Jethro, approved from God, substitute elders and judges; how much more other kings and princes?

There is a third reason, likewise, though not much to the present purpose; and that is, that kings, either in respect of the commonwealth, or of the greatness of their own patrimonies, are usually parties in suits: and then their judges stand indifferent between them and the subject: but in the case of bishops, none of these reasons hold. For, first, their office is elective, and for life, and not patrimonial or hereditary; an office merely of confidence, science, and qualification. And for the second reason, it is true, that their jurisdiction is ample, and spacious; and that their time is to be divided between the labours as well in the word and doctrine, as in government and jurisdiction: but yet I do not see, supposing the bishop's courts to be used incorruptly, and without any indirect course held to multiply causes for gain of fees, but that the bishop might very well, for causes of moment, supply his judicial function in his own person. For we see before our eyes, that one Chancellor of England despatcheth the suits in equity of the whole kingdom: which is not so much by reason of the excellency of that rare honourable person which now holdeth the place: but it was ever so, though more or less burdenous to the suitor, as the chancellor was more or less able to give despatch. And if hold be taken of that which was said before, that the bishop's labour in the word must take up a principal part of his time; so I may say again, that matters of state have ever taken up most of the chancellors' time; having been for the most part persons upon whom the kings of this realm have most relied for matters of counsel. And therefore there is no doubt but the bishop, whose circuit is less ample, and the causes in nature not so multiplying, with the help of references and certificates to and from fit persons, for the better ripening of causes in their mean proceedings, and such ordinary helps incident to jurisdiction, may very well suffice his office. But yet there is another help: for the causes that come before him, are these: tithes, legacies, administrations, and other testamentary causes; causes matrimonial; accusations against ministers, tending to their suspension, deprivation, or degrading; simony, incontinency,

were mentioned in my last, whereof I thought good presently to advertise his majesty. The days hold without all question, and all delays diverted and quieted.

Sir Edward Coke was at Friday's hearing, but in his night-cap; and complained to me, he was ambulant, and not current. I would be sorry he should fail us in this cause. Therefore I desired his majesty to signify to him by your lordship, taking knowledge of some light indisposition of his, how much he should think his service disadvantaged in this cause, if he should be at any day away; for then he cannot sentence.

By my next I will give his majesty some account of the tobacco and the currants. I ever rest

Your lordship's most obliged friend
and faithful servant,
Fr. Verulam, Canc.

November 20, at evening, 1619.

TO THE KING.

May it please your Majesty,

Sir Edward Coke is now a foot, and, according to your command, signified by Mr. Secretary Calvert, we proceed in Peacock's examinations. For although there have been very good diligence used, yet certainly we are not at the bottom; and he, that would not use the utmost of his line to sound such a business as this, should not have due regard, neither to your majesty's honour nor safety.

A man would think he were in Luke Hutton's case again; for as my Lady Roos personated Luke Hutton, so, it seemeth, Peacock personateth Atkins. But I make no judgment yet, but will go on with all diligence: and, if it may not be done otherwise, it is fit Peacock be put to torture. He deserveth it as well as Peacham did.

I beseech your majesty not to think I am more bitter, because my name is in it; for, besides that I always make my particular a cipher, when there is question of your majesty's honour and service, I think myself honoured for being brought into so good company. And as, without flattery, I think your majesty the best of kings, and my noble Lord of Buckingham the best of persons favoured; so I hope, without presumption, for my honest and true intentions to state and justice, and my love to my master, I am not the worst of chancellors.

God ever preserve your majesty.

Your majesty's most obliged
and most obedient servant.
Fr. Verulam, Canc.

February, 10, 1619.

The following papers, containing the Lord Chancellor Elesmere's exceptions to Sir Edward Coke's "Reports," and Sir Edward's answers, having never been printed, though Mr. Stephens, who had copied them from the originals, designed to have given them to the public, they are subjoined here in justice to the memory of that great lawyer and judge; especially as the offence taken at his "Reports" by King James, is mentioned above in the letter of the lord chancellor and Sir Francis Bacon, of October 16, 1616, *to that king.*

TO THE KING'S MOST EXCELLENT MAJESTY.

It may please your most excellent Majesty:

According to your majesty's directions signified unto me by Mr. Solicitor, I called the lord chief justice before me on Thursday the 17th of this instant, in the presence of Mr. Attorney and others of your learned counsel. I did let him know your majesty's acceptance of the few animadversions, which, upon review of his own labours, he had sent, though fewer than you expected, and his excuses other than you expected, as, namely, in the prince's case, the want of the original in French, as though, if the original had been "primogenitus" in Latin, then he had not in that committed any error. I told him farther, that because his books were many, and the cases therein, as he saith, 500, your majesty, out of your gracious favour, was pleased, that his memory should be refreshed; and that he should be put in mind of some passages dispersed in his books, which your majesty, being made acquainted with, doth as yet distaste, until you hear his explanation and judgment concerning the same. And that out of many some few should be selected, and that at this time he should not be pressed with more, and these few not to be the special and principal points of the cases, which were judged, but things delivered by discourse, and, as it were, by expatiation, which might have been spared and forborne, without prejudice to the judgment in the principal cases.

Of this sort Mr. Attorney and Mr. Solicitor made choice of five specially, which were read distinctly to the lord chief justice. He heard them with good attention, and took notes thereof in writing, and, lest there might be any mistaking either in the declaring thereof unto him, or in his misconceiving of the same, it was thought good to deliver unto him a true copy. Upon consideration whereof, and upon advised deliberation, he did yesterday in the afternoon return unto me, in the presence of all your learned counsel, a copy of the five points before mentioned, and his answer at large to the same, which I make bold to pre-

sent herewith to your majesty, who can best discern and judge both of this little which is done, and what may be expected of the multiplicity of other cases of the like sort, if they shall be brought to further examination. All that I have done in this hath been by your majesty's commandment and direction, in presence of all your learned counsel, and by the special assistance and advice of your attorney and solicitor.

I know obedience is better than sacrifice; for otherwise I would have been an humble suitor to your majesty to have been spared in all service concerning the lord chief justice. I thank God, I forget not the fifth petition, "Dimitte nobis debita nostra sicut, etc.;" but withal I have learned this distinction: there is, 1. "Remissio vindictæ." 2. "Remissio pœnæ." 3. "Remissio judicii." The two first I am past, and have freely and clearly remitted. But the last, which is of judgment and discretion, I trust I may in Christianity and with good conscience retain, and not to trust too far, etc.

I must beseech your majesty's favour to excuse me for all that I have here before written, but specially for this last needless passage; wherein I fear your majesty will note me to play the divine, without learning, and out of season. So, with my continual prayers to God to preserve your majesty with long, healthful, and happy life, and all earthly and heavenly felicity, I rest

Your majesty's humble and
faithful subject and servant,
T. Ellesmere, Canc.

At York House,
22 Oct. 1616.

THE HUMBLE AND DIRECT ANSWER TO THE FOURTH QUESTION ARISING OUT OF DR. BONHAM'S CASE.

In this case I am required to deliver what I mean by this passage therein, That in many cases the common law shall control acts of parliament; and sometimes shall adjudge them to be merely void; for where an act of parliament is against common right and reason, the common law shall control it, and adjudge it to be void.

The words of my report do not import any new opinion, but only a relation of such authorities of law, as had been adjudged and resolved in ancient and former times, and were cited in the argument of Bonham's case; and, therefore, the words of my book are these: "It appeareth in our books, that in many cases the common law shall control acts of parliament, and sometimes shall adjudge them to be utterly void; for when an act of parliament is against common right and reason, or repugnant or impossible to be performed, the common law shall control this, and adjudge such act to be void." And, therefore, in 8 E. III. 30, Thomas Tregor's case, upon the statute of West. 2, chap. 38, "et artic. super cart." chap. 9, Herle saith, Some statutes are made against law and right, which they, that made them, perceiving, would not put them in execution.

The statute of H. II. chap. 21, gives a writ of "Cessavit hæredi petenti super hæredem tenent et super eos, quibus alienatum fuerit hujusmodi tenementum." And yet it is adjudged in 33 E. III. "tit. cessavit" 42, where the case was, Two copartners, lords and tenant by fealty and certain rent; the one copartner hath issue, and dieth, the aunt and the niece shall not join in a "cessavit," because that the heir shall not have a "cessavit," for the cessor in his ancestor's time. Fitz. N. B. 209, F; and herewith accords Plow. Com. 110. And the reason is, because that in a "cessavit," the tenant, before judgment, may render the arrearages and damages, etc., and retain his land: and this he cannot do, when the heir bringeth a "cessavit" for the cessor in the time of his ancestor; for the arrearages incurred in the life of his ancestor do not belong to the heir.

And, because that this is against common right and reason, the common law adjudges the said act of parliament as to this point void. The statute of Carlisle, made anno, 35 E. I. enacteth, That the order of the Cistertians and Augustins have a convent and common seal; that the common seal shall be in the custody of the prior, which is under the abbot, and four others of the discreetest of the house; and that any deed sealed with the common seal, that is not so kept, shall be void. And the opinion in the 27 H. VI. tit. Annuity 41, was, that this statute is void; for the words of the book are, it is impertinent to be observed: for the seal being in their custody, the abbot cannot seal any thing with it; and, when it is in the hands of the abbot, it is out of their custody "ipso facto." And, if the statute should be observed, every common seal might be defeated by a simple surmise, which cannot be. Note, reader, the words of the said statute made at Carlisle, anno, 35 E. I. which is called "Statutum Religiosorum," are these: "Et insuper ordinavit dominus rex et statuit, quod abbates Cisterciences et Præmonstratenses ordinum religiosorum, etc. de cetero habeant sigillum commune, et illud in custodia prioris monasterii seu domus et quatuor de dignioribus et discretioribus ejusdem loci conventus sub privato sigillo abbatis ipsius loci custod. deponend. Et si forsan aliqua scripta obligationum, donationum, emptionum, venditionum, alienationum, seu aliorum quorumcunque contractuum alio sigillo quam tali sigillo communi sicut præmittitur custodit, inveniatur amodo, sigillata pro nullo penitus habeantur, omnique careant firmitate." So the statute of 1 E. VI chap. 14, gives chanteries, etc., to the king, saving to the donor, etc., all such rents, services, etc.; and the common law controls this, and adjudges it void as to the services; and the donor shall

have the rent as a rent-seck to distrain of common right; for it should be against common right and reason, that the king should hold of any, or do suit to any of his subjects, 14 Eliz. Dyer, 313. And so it was adjudged Mich. 16 and 17 Eliz. in the common place in Stroud's case. So, if any act of parliament give to any to hold, or to have conusance of all manner of pleas before him arising within his manor of D., yet he shall hold no plea, whereunto himself is a party, for "Iniquum est aliquem suæ rei esse judicem."

Which cases being cited in the argument of this case, and I finding them truly vouched, I reported them in this case, as my part was, and had no other meaning than so far as those particular cases there cited do extend unto. And therefore the beginning is, It appeareth in our books, etc. And so it may be explained, as it was truly intended.

In all which I most humbly submit myself to your majesty's princely censure and judgment.

EDW. COKE.

THE HUMBLE AND DIRECT ANSWER TO THE LAST QUESTION ARISING UPON BAGG'S CASE.

IT was resolved, that to this court of the king's bench belongeth authority not only to correct errors in judicial proceedings, but other errors and misdemeanors tending to the breach of the peace, or oppression of the subjects, or to the raising of faction or other misgovernment: so that no wrong or injury either public or private can be done, but it shall be reformed and punished by law.

Being commanded to explain myself concerning these words, and principally concerning this word, "misgovernment;"

I answer, that the subject-matter of that case concerned the misgovernment of the mayors and other the magistrates of Plymouth.

And I intended for the persons the misgovernment of such inferior magistrates for the matters in committing wrong or injury, either public or private, punishable by law, and therefore the last clause was added, "and so no wrong or injury, either public or private, can be done, but it shall be reformed and punished by law;" and the rule is "verba intelligenda sunt secundum subjectam materiam."

And that they and other corporations might know, that factions and other misgovernments amongst them, either by oppression, bribery, unjust disfranchisements, or other wrong or injury, public or private, are to be redressed and punished by law, it was so reported.

But, if any scruple remains to clear it, these words may be added "by inferior magistrates;" and so the sense shall be by faction or misgovernment of inferior magistrates, so as no wrong or injury, etc.

All which I most humbly submit to your majesty's princely judgment,

EDW. COKE.

MAY IT PLEASE YOUR LORDSHIP,

Above a year past, in my late lord chancellor's time, information was given to his majesty, that I having published in eleven works or books of reports, containing above 600 cases one with another, had written many things against his majesty's prerogative. And I being by his majesty's gracious favour called thereunto, all the exceptions, that could be taken to so many cases in so many books, fell to five, and the most of them too were by passages in general words; all which I offered to explain in such sort, as no shadow should remain against his majesty's prerogative, as in truth there did not; which whether it were related to his majesty, I know not. But thereupon the matter has slept all this time; and now the matter, after this ever blessed marriage, is revived, and two judges are called by my lord keeper to the former, that were named. My humble suit to your lordship is, that if his majesty shall not be satisfied with my former offer, viz. by advice of the judges to explain and publish as is aforesaid those five points, so as no shadow may remain against his prerogative; that then all the judges of England may be called hereunto. 2. That they may certify also what cases I have published for his majesty's prerogative and benefit, for the good of the church, and quieting of men's inheritances, and good of the commonwealth; for which purpose I have drawn a minute of a letter to the judges, which I assure myself your lordship will judge reasonable; and so reposing myself upon your lordship's protection, I shall ever remain,

Your most bounden servant,

EDW. COKE.

Superscribed,

To the right honourable his singular good lord, the Earl of Buckingham, of his majesty's privy council.

THE LETTER TO THE JUDGES.

WHEREAS, in the time of the late lord chancellor, intimation was given unto us, that divers cases were published in Sir Edward Coke's reports, tending to the prejudice of our prerogative royal; whereupon we, caring for nothing more, as by our kingly office we are bounden, than the preservation of prerogative royal, referred the same: and thereupon, as we are informed, the said Sir Edward Coke being called thereunto, the objections were reduced to five only, and most of them consisting

in general terms; all which Sir Edward offered, as we are informed, to explain and publish, so as no shadow might remain against our prerogative. And whereas, of late two other judges are called to the others formerly named. Now our pleasure and intention being to be informed of the whole truth, and that right be done to all, do think it fit, that all the judges of England, and barons of the exchequer, who have principal care of our prerogative and benefit, do assemble together concerning the discussing of that, which, as is aforesaid, was formerly referred; and also what cases Sir Edward Coke hath published to the maintenance of our prerogative and benefit, for the safety and increase of the revenues of the church, and for the quieting of men's inheritances, and the general good of the commonwealth: in all which we require your advice and careful considerations; and that before you make any certificate to us, you confer with the said Sir Edward, so as all things may be the better cleared.

To all the judges of England, and barons of the exchequer.

In the library of the late Thomas, Earl of Leicester, the descendant of Sir Edward Coke, at Holkham in Norfolk, is a copy of the Novum Organum, entitled *Instauratio Magna*, printed by John Bill in 1620, presented to Sir Edward, who, at the top of the titlepage, has written, *Edw. C. ex dono auctoris.*

Auctori Consilium.
Instaurare paras veterum documenta sophorum:
Instaurare Leges Justitiamq; prius.

And over the device of the ship passing between Hercules's pillars, Sir Edward has written the two following verses:

"It deserveth not to be read in schooles,
But to be freighted in the *Ship of Fools:*"

alluding to a famous book of Sebastian Brand, born at Strasburgh about 1460, written in Latin and High Dutch verse, and translated into English in 1508, by Alexander Barklay, and printed at London the year following by Richard Pynson, printer to Henry VII. and Henry VIII., in folio, with the following title, "The Shyp of Follys of the World: translated in the Coll. of Saynt Mary Otery in the counte of Devonshyre, oute of Latin, Frenche, and Doche, into Englesshe tongue, by Alex. Barklay, preste and chaplen in the said College M,CCCCC,VIII." It was dedicated by the translator to Thomas Cornish, Bishop of Tine, and suffragan Bishop of Wells, and adorned with great variety of wooden cuts.

THE CHARGE AGAINST MR. WHITELOCK.*

My Lords,

The offence, wherewith Mr Whitelocke is charged, for as to Sir Robert Mansell, I take it to my part only to be sorry for his error, is a contempt of a high nature, and resting upon two parts: on the one, a presumptuous and licentious censure and defying of his majesty's prerogative in general; the other a slander and traducement of one act or emanation hereof, containing a commission of survey and reformation of abuses in the office of the navy.

This offence is fit to be opened and set before your lordships, as it hath been well begun, both in the true state and in the true weight of it. For as I desire that the nature of the offence may appear in its true colours; so, on the other side, I desire, that the shadow of it may not darken or involve any thing that is lawful, or agreeable with the just and reasonable liberty of the subject.

First, we must and do agree, that the asking, and taking, and giving of counsel in law is an essential part of justice; and to deny that, is to shut the gate of justice, which in the Hebrew's commonwealth, was therefore held in the gate, to show all passage to justice must be open: and certainly counsel in law is one of the passages. But yet, for all that, this liberty is not infinite and without limits.

If a jesuited papist should come, and ask counsel (I put a case not altogether feigned) whether all the acts of parliament made in the time of Queen Elizabeth and King James are void or no; because there are no lawful bishops sitting in the Upper House, and a parliament must consist of lords spiritual and temporal and commons; and a lawyer will set it under his hand, that they be all void, I will touch him for high treason upon this his counsel.

So, if a puritan preacher will ask counsel, whether he may style the king Defender of the Faith, because he receives not the discipline and presbytery; and the lawyer will tell him, it is no

* He had been committed, in May, 1613, to the Fleet, for speaking too boldly against the marshal's court, and for giving his opinion to Sir Robert Mansell, treasurer of the navy, and vice-admiral, that the commission to the Earl of Nottingham, lord high admiral, for reviewing and reforming the disorders committed by the officers of the navy, was not according to law; though Mr. Whitelocke had given that opinion only in private to his client, and not under his hand. Sir Robert Mansell was also committed to the Marshalsea, for animating the lord admiral against the commission. [Sir Ralph Windwood's *Memorials of State*, Vol. III. p. 460.] This Mr. Whitelocke was probably the same with James Whitelocke, who was born in London, 28 November, 1572, educated at Merchant-taylor's school there, and St. John's college in Oxford, and studied law in the Middle Temple, of which he was summer reader in 1619. In the preceding year, 1618, he stood for the place of recorder of the city of London, but was not elected to it, Robert Heath, Esq. being chosen on the 10th of November, chiefly by the recommendation of the king, the city having been told, that they must choose none whom his majesty should refuse, as he did in particular except to Mr. Whitelocke by name. [MS. letter of Mr. Chamberlain to Sir Dudley Carleton, November 14, 1618.] Mr. Whitelocke, however, was called to the degree of serjeant in Trinity term, 1620, knighted, made chief justice of Chester; and at last, on the 18th of October, 1624, one of the justices of the king's bench; in which post he died, June, 1632. He was father of Bulstrode Whitelocke, Esq.; commissioner of the great seal.

part of the king's style, it will go hard with such a lawyer.

Or if a tribunitious popular spirit will go and ask a lawyer, whether the oath and band of allegiance be to the kingdom and crown only, and not to the king, as was Hugh Spenser's case, and he deliver his opinion as Hugh Spenser did; he will be in Hugh Spenser's danger.

So as the privilege of giving counsel proveth not all opinions: and as some opinions given are traitorous; so are there others of a much inferior nature, which are contemptuous. And among these I reckon Mr. Whitelocke's; for as for his loyalty and true heart to the king, God forbid I should doubt it.

Therefore, let no man mistake so far, as to conceive, that any lawful and due liberty of the subject for asking counsel in law is called in question when points of disloyalty or of contempt are restrained. Nay, we see it is the grace and favour of the king and his courts, that if the case be tender, and a wise lawyer in modesty and discretion refuseth to be of counsel, for you have lawyers sometimes too nice as well as too bold, they are then ruled and assigned to be of counsel. For certainly counsel is the blind man's guide; and sorry I am with all my heart, that in this case the blind did lead the blind.

For the offence, for which Mr. Whitelocke is charged, I hold it great, and to have, as I said at first, two parts: the one a censure, and, as much as in him is, a circling, nay, a clipping, of the king's prerogative in general; the other, a slander and depravation of the king's power and honour in this commission.

And for the first of these, I consider it again in three degrees: first, that he presumed to censure the king's prerogative at all. Secondly, that he runneth into the generality of it more than was pertinent to the present question. And, lastly, that he hath erroneously, and falsely, and dangerously given opinion in derogation of it.

First, I make a great difference between the king's grants and ordinary commissions of justice, and the king's high commissions of regiment, or mixed with causes of state.

For the former, there is no doubt but they may be freely questioned and disputed, and any defect in matter or form stood upon, though the king be many times the adverse party:

But for the latter sort, they are rather to be dealt with, if at all, by a modest, and humble intimation or remonstrance to his majesty and his council, than by bravery of dispute or peremptory opposition.

Of this kind is that properly to be understood, which is said in Bracton, "De chartis et factis regiis non debent aut possunt justitiarii aut privatæ personæ disputare, sed tutius est, ut expectetur sententia regis."

And the king's courts themselves have been exceeding tender and sparing in it; so that there is in all our law not three cases of it. And in that very case of 24 Ed. III. ass. pl 8. which Mr. Whitelocke vouched, where, as it was a commission to arrest a man, and to carry him to prison, and to seize his goods without any form of justice or examination preceding; and that the judges saw it was obtained by surreption: yet the judges said they would keep it by them, and show it to the king's council.

But Mr. Whitelocke did not advise his client to acquaint the king's council with it, but presumptuously giveth opinion, that it is void. Nay, not so much as a clause or passage of modesty, as that he submits his opinion to censure: that it is too great a matter for him to deal in; or this is my opinion, which is nothing, etc. But "illotis manibus," he takes it into his hands, and pronounceth of it, as a man would scarcely do of a warrant of a justice of peace, and speaks like a dictator, that "this is law," and "this is against law," etc.*

ROBERT EARL OF SOMERSET TO SIR THOMAS OVERBURY.† FROM A COPY AMONG LORD BACON'S PAPERS IN THE LAMBETH LIBRARY.

SIR,

I have considered that my answer to you, and what I have otherwise to say, will exceed the bounds of a letter; and now having not much time to use betwixt my waiting on the king, and the removes we do make in this our little progress, I thought fit to use the same man to you, whom I have heretofore many times employed in the same business. He has, besides, an account and a better description of me to give you, to

* Sir H. Wotton, in a letter of his to Sir Edmund Bacon, [*Reliq. Wotton*, p. 421, edit. 3d,] written about the beginning of June, 1613, mentions, that Sir Robert Mansell and Mr. Whitelocke were, on the Saturday before, called to a very honourable hearing in the queen's presence-chamber at Whitehall, before the lords of the council, with intervention of the Lord Chief Justice Coke, the Lord Chief Baron Tanfield, and the master of the rolls; the lord chief justice of the king's bench, Fleming, being kept at home by some infirmity. There the attorney and solicitor first undertook Mr. Whitelocke, and the recorder, [Henry Montagu,] as the king's serjeant, Sir Robert Mansell, charging the one as a counsellor, the other as a questioner, in matters of the king's prerogative and sovereignty upon occasion of a commission intended for a research into the administration of the admiralty. "Whitelocke in his answer," adds Sir Henry Wotton, "spake more confusedly than was expected from a lawyer; and the knight more temperately than was expected from a soldier . . . . Whitelocke ended his speech with an absolute confession of his own offence, and with a promise of employing himself hereafter in defence of the king's prerogative . . . . In this they generally agreed, both counsellors and judges, to represent the humiliation of both the prisoners to the king, in lieu of innocency, and to intercede for his gracious pardon: which was done, and accordingly the next day they were enlarged upon a submission under writing."

† He was committed to the Tower on the 21st of April, 1613, and died there of poison on the 15th of September following

make a repetition of the former carriages of all this business, that you may distinguish that, which he did by knowledge of mine and direction, and betwixt that he did out of his own discretion, without my warrant. With all this he has to renew to you a former desire of mine, which was the groundwork of this, and the chief errand of his coming to you, wherein I desire your answer by him. I would not employ this gentleman to you, if he were, as you conceit of him, your unfriend, or an ill instrument betwixt us. So owe him the testimony of one, that has spoken as honestly, and given more praises of you, than any man that has spoken to me.

My haste at this time makes me to end sooner than I expected: but the subject of my next sending shall be to answer that part you give me in your love, with a return of the same from

Your assured loving friend,
R. SOMERSET.

Endorsed,
Lord Somerset's first letter.

TO THE KING.

IT MAY PLEASE YOUR MOST EXCELLENT MAJESTY,

We have, with all possible care and diligence, considered Cotton's* cause, the former and the latter, touching the book and the letter in the gilt apple, and have advisedly perused and weighed all the examinations and collections which were formerly taken; wherein we might attribute a good deal of worthy industry and watchful inquiry to my Lord of Canterbury. We thought fit also to take some new examinations; which was the cause we certified no sooner. Upon the whole matter, we find the cause of his imprisonment just, and the suspicions and presumptions many and great; which we little need to mention, because your majesty did relate and enforce them to us in better perfection, than we can express

* The case of this gentleman will render the detail of it necessary for the illustration of this letter; and the circumstances of it, not known in our history, may be thought to deserve the reader's attention. He was a native of the West of England, and a recusant, against whom a proclamation was issued in June, 1613, charging him with high treason against the king and state, for having published a very scandalous and railing book against his majesty, under the title of *Balaam's Ass*, which was dropped in the gallery at Whitehall. Just at the time of publishing this proclamation, he happened to cross the Thames, and inquiring of the watermen what news? they, not knowing him, told him of the proclamation. At landing, he muffled himself up in his cloak, to avoid being known; but had not gone many paces, when one Mr. Maine, a friend of his, meeting and discovering him, warned him of his danger; and being asked what he would advise him to do, recommended it to him to surrender himself; which he did to the Earl of Southampton. He denied himself to be the author of the libel: but his study being searched, among his papers were found many parts of the book, together with relics of those persons who had been executed for the gunpowder treason, as one of Sir Everard Digby's fingers, a toe of Thomas Percy, some other part of Catesby or Rookewood, and a piece of one of Peter Lambert's ribs. He was kept prisoner in the Tower till March, 1618, when the true author of the libel was discovered to be John Williams, Esq., a barrister of the Middle Temple, who had been expelled the House of Commons on account of his being a Papist. The discovery was owing to this accident: a pursuivant in want of money, and desirous to get some by his employment, waited at the Spanish ambassador's door, to see if he could light upon any prey. At last came out Mr. Williams, unknown to the pursuivant; but carrying, in his conceit, the countenance of a priest. The pursuivant, therefore, followed him to his inn, where Williams having mounted his horse, the pursuivant came to him, and told him, that he must speak a word or two with him. "Marry, with all my heart," *said Williams*; "what is your pleasure?" *You must light*, answered the pursuivant: *for you are a priest*. "A priest?" *replied Williams*; "I have a good warrant to the contrary, for I have a wife and children." Being, however, obliged to dismount, the pursuivant searched him; and in his pocket was found a bundle of papers sealed up; which the pursuivant going to open, Williams made some resistance, pretending they were evidences of a gentleman whose law businesses he transacted. The pursuivant insisting upon opening the papers, among them was found *Balaam's Ass*, with new annotations; of which, upon examination, *Williams* confessed himself to be the author. He was brought to trial on the 3d of May, 1619, for writing that and another book entitled *Speculum Regale*, in both of which he had presumed to prophesy, that the king would die in 1621, grounding this prediction on the prophecy of Daniel, where the prophet speaks of *time and times, and half a time*. He farther affirmed, that Antichrist will be revealed when sin shall be at the highest, and then the end is nigh: that such is our time: sin is now at the highest; *ergo*, that the land is the abomination of desolation mentioned by Daniel, and the habitation of devils, and the antimark of Christ's church. Williams's defence was, 1. That what he had written was not with any malice or disloyalty of heart towards the king, but purely from affection, and by way of caution and admonition, that his majesty might avoid the mischiefs likely to befall him; having added in his book, when he delivered the threats of judgment and destruction, *which God avert*, or such words. 2. That the matter rested only in opinion and thought, and contained no overt act; no rebellion, treason, or other mischief following it. 3. That he had enclosed his book in a box sealed up, and secretly conveyed it to the king, without ever publishing it. But the court was unanimously of opinion, that he was guilty of high treason; and that the words contained in the libel, as cited above, imported the end and destruction of the king and his realm; and that antichristianism and false religion were maintained in the said realm; which was a motive to the people to commit treasons, to raise rebellions, &c., and that the writing of the book was a publication. *Reports of Henry Rolle, serjeant at law, part* II. p. 88. In consequence of this judgment he had a sentence of death passed upon him, which was executed over against Charing-cross two days after. MS. letters of Mr. Thomas Lorkin to Sir Thomas Puckering, Bart., dated at London, June the 24th and 30th, 1613, and March the 16th, 1618–9, and May the 4th and 5th, 1619, among the Harleian MSS. vol. 7002. At his death he adhered to his profession of the Roman Catholic religion, and died with great resolution. He prayed for the king and prince; and said, that he was sorry for having written so saucily and irreverently; but pretended that he had an inward warrant and particular illumination to understand certain hard passages of Daniel and the Revelation, which made him adventure so far. MS. letter of John Chamberlain, Esq. to Sir Dudley Carleton, dated at London, May 8, 1619.

This case was urged against the *seven bishops* at their trial in King James II.'s reign by Sir William Williams, then solicitor-general, who observed, *Trial*, p. 76, that it had been made use of by Mr. Solicitor-General Finch on the trial of Col. Sidney, and was the great "case relied upon, and that guided and governed that case;" though there is nothing of this, that appears in the printed trial of Sidney.

It is but justice to the memory of our great antiquary, Sir Robert Cotton, Bart., to remark here a mistake of Dr. Thomas Smith in his life of Sir Robert, p. 26, prefixed to his catalogue of the Cottonian library, where he has confounded the Cotton mentioned in the beginning of this note, with Sir Robert Cotton, and erroneously supposed, that the suspicion of having written the libel had fallen upon the latter.

them. But, nevertheless, the proofs seem to us to amount to this, that it was possible he should be the man; and that it was probable, likewise, he was the man: but no convicting proofs, that may satisfy a jury of life and death, or that may make us take it upon our conscience, or to think it agreeable to your majesty's honour, which next our conscience to God, is the dearest thing to us on earth, to bring it upon the stage: which, notwithstanding, we, in all humbleness, submit to your majesty's better judgment. For his liberty, and the manner of his delivery, he having so many notes of a dangerous man, we leave it to your princely wisdom. And so, commending your majesty to God's precious custody, we rest

Your majesty's most humble and bounden servants, FR. BACON,
H. MONTAGU,
H. YELVERTON.

22 Jan. 1613.

TO JOHN MURRAY* OF THE BED-CHAMBER TO THE KING.†

MR. MURRAY,

I keep the same measure in a proportion with my master and with my friend; which is, that I will never deceive them in any thing, which is in my power; and when my power faileth my will, I am sorry.

Monday is the day appointed for performing his majesty's commandment. Till then I cannot tell what to advise you farther, except it should be this, that in case the judges should refuse to take order in it themselves, then you must think of some warrant to Mr. Secretary, who is your friend, and constant in the businesses, that he see forthwith his majesty's commandment executed, touching the double lock; and, if need be, repair to the place, and see by view the manner of keeping the seal; and take order, that there be no stay for working of the seal of justice, nor no prejudice to Killegrew's farm, nor to the duty of money paid to the chief justice. Whether this may require your presence, as you write, that yourself can best judge. But of this more, when we have received the judges' answer. It is my duty, as much as in me is, to procure my master to be obeyed. I ever rest

Your friend and assured,
FR. BACON.

January 21, 1614.

I pray deliver the enclosed letter to his majesty.

To his very good friend Mr. John Murray, of his majesty's bed-chamber.

* He was created Viscount of Annan in Scotland in August 1622. *Negotiations of Sir Thomas Roe, in his embassy to the Ottoman Porte*, p. 93. In April, 1624, the Lord Annan was created Earl of Annandale in Scotland. Ibid. p. 256.

† This and the following letters, are printed from Harl. MSS. vol. 6988

TO MR. MURRAY.

MR. MURRAY,

My lord chancellor, yesterday in my presence, had before him the judges of the common pleas, and hath performed his majesty's royal command in a very worthy fashion, such as was fit for our master's greatness; and because the king may know it, I send you the enclosed. This seemeth to have wrought the effect desired; for presently I sent for Sir Richard Cox,* and willed him to present himself to my Lord Hobart, and signify his readiness to attend. He came back to me, and told me, all things went on. I know not what afterwards may be; but I think this long chase is at an end. I ever rest

Yours assured,
FR. BACON.

January 25, 1614.

TO MR. MURRAY.

MR. MURRAY,

I pray deliver the enclosed to his majesty, and have care of the letter afterwards. I have written also to his majesty about your reference to this purpose, that if you can get power over the whole title, it may be safe for his majesty to assent, that you may try the right upon the deed. This is the farthest I can go. I ever rest

Yours assured,
FR. BACON.

February 28, 1614.

TO THE KING.

MAY IT PLEASE YOUR MOST EXCELLENT MAJESTY,

I send your majesty enclosed, a copy of our last examination of Peacham,† taken the 10th of this

* He was one of the masters of the green cloth, and had had a quarrel at court during the Christmas holy-days of the year 1614, with Sir Thomas Erskine; which quarrel was made up by the lords of the marshal's court, Sir Richard being obliged to put up with very foul words. MS. letter of Mr. Chamberlain to Sir Dudley Carleton, January 12, 1614-5.

† Edmund Peacham, a minister in Somersetshire. [MS. letter of Mr. Chamberlain, dated January 5, 1614-5.] I find one of both his names, who was instituted into the vicarage of Ridge, in Hertfordshire, July 22, 1581, and resigned it in 1587. [Newcourt, *Reperter*, vol. i. p. 864.] Mr. Peacham was committed to the Tower for inserting several treasonable passages in a sermon *never preached, nor*, as Mr. Justice Coke remarks in his *Reports* during the reign of King Charles I., p. 125, *ever intended to be preached*. Mr. Chamberlain, in a letter of the 9th of February, 1614-5, to Sir Dudley Carleton, mentions Mr. Peacham's having been "stretched already, though he be an old man, and, they say, much above threescore: but they could wring nothing out of him more than they had at first in his papers. Yet the king is extremely incensed against him, and will have him prosecuted to the utmost." In another letter, dated February 23, we are informed, that the king, since his coming to London on the 15th, had had "the opinion of the judges severally in Peacham's case; and it is said, that most of them concur to find it treason: yet my Lord Chief Justice [Coke] is for the contrary; and if the Lord Hobart, that

present; whereby your majesty may perceive, that this miscreant wretch goeth back from all, and denieth his hand and all. No doubt, being fully of belief, that he should go presently down to his trial, he meant now to repeat his part, which he purposed to play in the country, which was to deny all. But your majesty in your wisdom perceiveth, that this denial of his hand, being not possible to be counterfeited, and to be sworn by Adams, and so oft by himself formerly confessed and admitted, could not mend his case before any jury in the world, but rather aggravateth it by his notorious impudency and falsehood, and will make him more odious. He never deceived me; for when others had hopes of discovery, and thought time well spent that way, I told your majesty "pereuntibus mille figuræ;" and that he now did but turn himself into divers shapes, to save or delay his punishment. And, therefore, submitting myself to your majesty's high wisdom, I think myself bound in conscience to put your majesty in remembrance, whether Sir John Sydenham* shall be detained upon this man's impeaching, in whom there is no truth. Notwithstanding, that farther inquiry be made of this other Peacham, and that information and light be taken from Mr. Poulet† and his servants, I hold it, as things are, necessary.

God preserve your majesty.

Your majesty's most humble
and devoted subject and servant,
FR. BACON.

March 12, 1614.

rides the western circuit, can be drawn to jump with his colleague, the chief baron, [Tanfield,] it is thought he shall be sent down to be tried, and trussed up in Somersetshire." In a letter of the 2d of March, 1614-5, Mr. Chamberlain writes, "Peacham's trial at the western assizes is put off, and his journey stayed, though Sir Randall Crew, the king's serjeant, and Sir Henry Yelverton, the solicitor, were ready to go to horse to have waited on him there." "Peacham, the minister, *adds he in a letter of the 13th of July*, 1615, that hath been this twelvemonth in the Tower, is sent down to be tried for treason in Somersetshire before the Lord Chief Baron, and Sir Henry Montagu, the recorder. The Lord Hobart gave over that circuit the last assizes. Sir Randall Crew and Sir Henry Yelverton, the king's serjeant and solicitor, are sent down to prosecute the trial." The event of this trial, which was on the 7th of August, appears from Mr. Chamberlain's letter of the 14th of that month, wherein it is said, that "seven knights were taken from the bench, and appointed to be of the jury. He defended himself very simply, but obstinately and doggedly enough. But his offence was so foul and scandalous, that he was condemned of high treason; yet not hitherto executed, nor perhaps shall be, if he have the grace to submit himself, and show some remorse." He died, as appears from another letter of the 27th of March, 1616, in the jail at Taunton, where he was said to have "left behind a most wicked and desperate writing, worse than that he was convicted for."

* He had been confronted about the end of February, or beginning of March, 1614-5, with Mr. Peacham, about certain speeches, which had formerly passed between them. MS. letter of Mr. Chamberlain to Sir Dudley Carleton, from London, March 2, 1614-5.

† John Poulet, Esq.; knight of the shire for the county of Somerset, in the parliament which met April 5, 1614. He was created Lord Poulet of Henton St. George, June 22, 1627.

SUPPLEMENT OF TWO PASSAGES OMITTED IN THE EDITION OF SIR FRANCIS BACON'S SPEECH IN THE KING'S BENCH, AGAINST OWEN,* AS PRINTED IN HIS WORKS.

After the words [*it is bottomless*] *in the paragraph beginning* [*for the treason itself, which is the second point, etc.,*] *add*

[I said in the beginning, that this treason, in the nature of it, was old. It is not of the treasons, whereof it may be said, "from the beginning it was not so." You are indicted, Owen, not upon any statute made against the pope's supremacy, or other matters, that have reference to religion; but merely upon that law, which was born with the kingdom, and was law even in superstitious times, when the pope was received. The compassing and imagining of the king's death was treason. The statute of the 25th of Edward III., which was but declaratory, begins with this article, as the capital of capitals in treason, and of all others the most odious and the most perilous.] And so the civil law, etc.

At the conclusion of his speech, after the words, ["the Duke of Anjou and the Papists,"] add

[As for subjects, I see not, or ever could discern, but that by infallible consequence, it is the case of all subjects and people, as well as of kings; for it is all one reason, that a bishop, upon an excommunication of a private man, may give his lands and goods in spoil, or cause him to be slaughtered, as for the pope to do it towards a king; and for a bishop to absolve the son from duty to the father, as for the pope to absolve the subject from his allegiance to his king. And this is not my inference, but the very affirmative of Pope Urban the Second, who in a brief to Godfrey, Bishop of Luca, hath these very words, which Cardinal Baronius reciteth in his Annals, tom. xi. p. 802. "Non illos homicidas arbitramur, qui adversus excommunicatos zelo catholicæ matris ardentes eorum quoslibet trucidare contigerit," speaking generally of all excommunications.]

TO THE KING.†

IT MAY PLEASE YOUR EXCELLENT MAJESTY,

I received this very day, in the forenoon, your majesty's several directions touching your cause

* He was of the family of that name at Godstow, in Oxfordshire. [*Camdeni Annales Regis Jacobi I.* p. 2.] He was a young man, who had been in Spain; and was condemned at the King's Bench, on Wednesday, May 17, 1615, "for divers most vile and traitorous speeches confessed and subscribed with his own hand; as, among others, that it was as lawful for any man to kill a king excommunicated, as for the hangman to execute a condemned person. He could say little for himself, or in maintenance of his desperate positions, but only that he meant it not by the king, and he holds him not excommunicated." MS. letter of Mr. Chamberlain to Sir Dudley Carleton, from London, May 20, 1615.

† Harl. MSS. Vol. 6986.

prosecuted by my Lord Hunsdon* as your farmer. Your first direction was by Sir Christopher Parkins, that the day appointed for the judicial sentence should hold: and, if my lord chief justice, upon my repair to him, should let me know, that he could not be present, then my lord chancellor should proceed, calling to him my Lord Hobart, except he should be excepted to; and then some other judge by consent. For the latter part of this your direction, I suppose, there would have been no difficulty in admitting my Lord Hobart; for after he had assisted at so many hearings, it would have been too late to except to him. But then your majesty's second and later direction, which was delivered unto me from the Earl of Arundel, as by word of mouth, but so as he had set down a remembrance thereof in writing freshly after the signification of his pleasure, was to this effect, that before any proceeding in the chancery, there should be a conference had between my lord chancellor, my lord chief justice, and myself, how your majesty's interest might be secured. This later direction I acquainted my lord chancellor with; and finding an impossibility, that this conference should be had before to-morrow, my lord thought good, that the day be put over, taking no occasion thereof other than this, that in a cause of so great weight it was fit for him to confer with his assistants, before he gave any decree or final order. After such a time as I have conferred with my lords, according to your commandment, I will give your majesty account with speed of the conclusion of that conference.

Farther, I think fit to let your majesty know, that in my opinion I hold it a fit time to proceed in the business of the "Rege inconsulto," which is appointed for Monday. I did think these greater causes would have come to period or pause sooner: but now they are in the height, and to have so great a matter as this of the "Rege inconsulto" handled, when men do "aliud agere," I think it no proper time. Besides, your majesty in your great wisdom knoweth, that this business of Mr. Murray's is somewhat against the stream of the judge's inclination: and it is no part of a skilful mariner to sail on against a tide, when the tide is at strongest. If your majesty be pleased to write to my Lord Coke, that you would have the business of the "Rege inconsulto" receive a hearing, when he should be "animo sedato et libero," and not in the midst of his assiduous and incessant cares and industries in other practices, I think your majesty shall do your service right. Howsoever, I will be provided against the day.

Thus praying God for your happy preservation, whereof God giveth you so many great pledges,

I rest your majesty's most humble
and devoted subject and servant,
FR. BACON.

November 17, 1615.

* John Carey, Baron of Hunsdon. He died in April, 1617.

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*Innovations introduced into the laws and government.**

1. The ecclesiastical commission.	In this he prevailed, and the commission was pared, and namely the point of alimony left out, whereby wives are left wholly to the tyranny of their husbands. This point, and some others, may require a review, and is fit to be restored to the commission.
2. Against the provincial councils.	In this he prevaileth in such sort, as the prececents are continually suitors for the enlargement of the instructions, sometimes in one point, sometimes in another; and the jurisdictions grow into contempt, and more would, if the lord chancellor did not strengthen them by injunctions, where they exceed not their instructions.
3. Against the Star Chamber, for levying damages.	In this he was overruled by the sentence of the court; but he bent all his strength and wits to have prevailed; and so did the other judges by long and laborious arguments: and if they had prevailed, the authority of the court had been overthrown. But the plurality of the court toook more regard to their own precedents, than to the judges' opinion.
4. Against the admiralty.	In this he prevaileth, for prohibitions fly continually; and many times are cause of long

* This paper was evidently designed against the Lord Chief Justice Coke.

suits, to the discontent of foreign ambassadors, and the king's dishonour and trouble by their remonstrances.

5. Against the court of the duchy of Lancaster prohibitions go; and the like may do to the court of wards and exchequer.

This is new, and would be forthwith restrained, and the others settled.

6. Against the court of requests.

In this he prevaileth; and this but lately brought in question.

7. Against the chancery for decrees after judgment.

In this his majesty hath made an establishment: and he hath not prevailed, but made a great noise and trouble.

8. Præmunire for suits in the chancery.

This his majesty hath also established, being a strange attempt to make the chancellor sit under a hatchet, instead of the king's arms.

9. Disputed in the common pleas, whether that court may grant a prohibition to stay suits in the chancery, and time given to search for precedents.

This was but a bravery, and dieth of itself, especially the authority of the chancery by his majesty's late proceedings being so well established.

10. Against the new boroughs in Ireland.

This in good time was overruled by the voice of eight judges of ten, after they had heard your attorney. And had it prevailed, it had overthrown the parliament of Ireland, which would have been imputed to a fear in this state to have proceeded; and so his majesty's authority and reputation lost in that kingdom.

11. Against the writs "Dom. Rege inconsulto."

This is yet "sub judice:" but if it should prevail, it maketh the judges absolute over the patents of the king, be they of power and profit, contrary to the ancient and ever continued law of the crown, which doth call those causes before the king himself, as he is represented in chancery.

12. Against contribution, that it was not law neither to levy it, nor to move for it.

In this he prevailed, and gave opinion, that the king by his great seal could not so much as move any his subjects for benevolence. But this he retracted after in the Star Chamber; but it marred the benevolence in the mean time.

13. Peacham's case.

In this, for as much as in him was, and in the court of king's bench, he prevailed, though it was holpen by the good service of others. But the opinion which he held, amounted in effect to this, that no word of scandal or defamation, importing that the king was utterly unable or unworthy to govern, were treason, except they disabled his title, etc.

14. Owen's case.

In this we prevailed with him to give opinion it was treason: but then it was upon a conceit of his own, that was no less dangerous, than if he had given his opinion against the king: for he proclaimed the king excommunicated in respect of the anniversary bulls of "Cœna Domini," which was to expose his person to the fury of any jesuited conspirator.

15. The value of benefices not to be according to the tax in the king's book of taxes.

By this the intent of the statute of 21 Henry VIII., is frustrated; for there is no benefice of so small an improved value as 8*l.* by that kind of rating. For this the judges may be assembled in the exchequer for a conference.

16. Suits for legacies ought to be in their proper dioceses, and not in the prerogative court; although the will be proved in the prerogative court upon "bona

The practice hath gone against this, and it is fit, the suit be where the probate is. And this served but to put a pique between the archbishops' courts and the bishops' courts. This

notabilia" in several dioceses, commendams, etc.

may be again propounded upon a conference of the judges.

SIR FRANCIS BACON TO SIR GEORGE VILLIERS.

*Touching the examination of Sir Robert Cotton upon some information of Sir John Digby.**

I RECEIVED your letter yesterday towards the evening, being the 8th of this present, together with the interrogatory included, which his majesty hath framed, not only with a great deal of judgment what to interrogate, but in a wise and apt order; for I do find that the degrees of questions are of great efficacy in examination. I received also notice and direction by your letter, that Sir Robert Cotton was first thoroughly to be examined; which indeed was a thing most necessary to begin with; and that for that purpose Sir John Digby was to inform my lord chancellor of such points, as he conceived to be material; and that I likewise should take a full account for my lord chief justice of all Sir Robert Cotton's precedent examinations. It was my part then to take care, that that, which his majesty had so well directed and expressed, should be accordingly performed without loss of time. For which purpose, having soon after the receipt of your letter received a letter from my lord chancellor, that he appointed Sir John Digby to be with him at two of the clock in the afternoon, as this day, and required my presence, I spent the mean time, being this forenoon, in receiving the precedent examinations of Sir Robert Cotton from my lord chief justice, and perusing of them; and accordingly attended my lord chancellor at the hour appointed, where I found Sir John Digby.

At this meeting it was the endeavour of my lord chancellor and myself to take such light from Sir John Digby, as might evidence first the examination of Sir Robert Cotton; and then to the many examinations of Somerset; wherein we found Sir John Digby ready and willing to discover unto us what he knew; and he had also, by the lord chancellor's direction, prepared some heads of examination in writing for Sir Robert Cotton; of all which use shall be made for his majesty's service, as is fit. Howbeit, for so much as did concern the practice of conveying the prince into Spain, or the Spanish pensions, he was somewhat reserved upon this ground, that they were things his majesty knew, and things, which by some former commandment from his majesty he was restrained to keep in silence, and that he conceived they could be no ways applied to Somerset. Wherefore it was not fit to press him beyond that, which he conceived to be his warrant, before we had known his majesty's farther pleasure; which I pray you return unto us with all convenient speed. I for my part am in no appetite for secrets; but, nevertheless, seeing his majesty's great trust towards me, wherein I shall never deceive him; and that I find the chancellor of the same opinion, I do think it were good my lord chancellor chiefly and myself were made acquainted with the persons and the particulars; not only because it may import his majesty's service otherwise, but also because to my understanding, for therein I do not much rely upon Sir John Digby's judgment, it may have a great connection with the examination of Somerset, considering his mercenary nature, his great undertaking for Spain in the match, and his favour with his majesty; and therefore the circumstances of other pensions given cannot but tend to discover whether he were pensioner or no.

But herein no time is lost; for my lord chancellor, who is willing, even beyond his strength, to lose no moment for his majesty's service, hath appointed me to attend him Thursday morning for the examination of Sir Robert Cotton, leaving tomorrow for council-business to my lord, and to me for considering of fit articles for Sir Robert Cotton.

10 April, 1616.

SIR FRANCIS BACON TO THE JUDGES.

MY LORD,

It is the king's express pleasure, that because his majesty's time would not serve to have conference with your lordship and his judges touching his cause of commendams at his last being in town, in regard of his majesty's other most weighty occasions; and for that his majesty holdeth it necessary, upon the report, which my Lord of Winchester, who was present at the last argument by his majesty's royal commandment, made to his majesty, that his majesty be first consulted with, ere there be any further proceeding by argument by any of the judges or otherwise: Therefore, that the day appointed for the farther proceeding by argument of the judges in that case be put off till his majesty's farther pleasure be known upon consulting him; and to that end, that your lordship forthwith signify his commandment to the rest of the judges; whereof your

* Secretary Winwood, in a private letter to Sir Thomas Edmondes, printed in the *Historical View of the Negotiations between the Courts of England, France, and Brussels*, p. 392, mentions, that there was great expectation, that Sir John Digby, just then returned from Spain, where he had been ambassador, could charge the Earl of Somerset with *some treasons and plots with Spain*. "To the king," *adds Sir Ralph*, "as yet he hath used no other language, but that, having served in a place of honour, it would ill become him to be an accuser. Legally or criminally he can say nothing: yet this he says and hath written, that all his private despatches, wherein he most discovered the practices of Spain, and their intelligences, were presently sent into Spain; which could not be but by the treachery of Somerset."

lordship may not fail. And so I leave your lordship to God's goodness.

Your loving friend to command,

FR. BACON.

This Thursday, at afternoon,
the 25th of April, 1616.

QUESTIONS LEGAL FOR THE JUDGES [IN THE CASE OF THE EARL AND COUNTESS OF SOMERSET.*]

WHETHER the axe is to be carried before the prisoner, being in the case of felony?

Whether, if the lady make any digression to clear his lordship, she is not by the lord steward to be interrupted and silenced?

Whether, if my Lord of Somerset should break forth into any speech of taxing the king, he be not presently by the lord steward to be interrupted and silenced; and, if he persist, he be not to be told, that if he take that course, he is to be withdrawn, and evidence to be given in his absence? And whether that may be; and what else to be done?

Whether, if there should be twelve votes to condemn, and twelve or thirteen to acquit, it be not a verdict for the king?

QUESTIONS OF CONVENIENCE, WHEREUPON HIS MAJESTY MAY CONFER WITH SOME OF HIS COUNCIL.

WHETHER, if Somerset confess at any time before his trial, his majesty shall stay trial in respect of farther examination concerning practice of treason, as the death of the late prince, the conveying into Spain of the now prince, or the like; for till he confess the less crime, there is [no] likelihood of confessing the greater?

Whether, if the trial upon that reason shall be put off, it shall be discharged privately by dissolving the commission, or discharging the summons? Or, whether it shall not be done in open court, the peers being met, and the solemnity and celebrity preserved; and that with some declaration of the cause of putting off the farther proceeding?

Whether the days of her trial and his shall be immediate, as it is now appointed; or a day between, to see if, after condemnation, the lady will confess of this lord; which done, there is no doubt but he will confess of himself?

Whether his trial shall not be set first, and hers after, because then any conceit, which may be wrought by her clearing of him, may be prevented; and it may be he will be in the better temper, hoping of his own clearing, and of her respiting?

What shall be the days; for Thursday and Friday can hardly hold in respect of the summons; and it may be as well Friday and Saturday, or Monday and Tuesday, as London makes it already?

* See ante, page 281.

A PARTICULAR REMEMBRANCE FOR HIS MAJESTY.

IT were good, that after he is come into the Hall, so that he may perceive he must go to trial, and shall be retired into the place appointed, till the court call for him, then the lieutenant should tell him roundly, that if in his speeches he shall tax the king,* that the justice of England is, that he shall be taken away, and the evidence shall go on without him; and then all the people will cry "away with him;" and then it shall not be in the king's will to save his life, the people will be so set on fire.

Endorsed,

Memorial touching the course to be had in my Lord of Somerset's arraignment.

THE HEADS OF THE CHARGE AGAINST ROBERT EARL OF SOMERSET.

Apostyle of the king.

Ye will doe well to remember lykewayes in your præamble, that insigne, that the only zeal to justice maketh me take this course. I have commandit you

FIRST it is meant, that Somerset shall not be charged with any thing by way of aggravation, otherwise than as conduceth to the proof of the impoisonment.

For the proofs themselves, they are distributed into four:

* The king's apprehension of being *taxed* by the Earl of Somerset on his trial, though for what is not known, accounts in some measure for his majesty's extreme uneasiness of mind till that trial was over, and for the management used by Sir Francis Bacon in particular, as appears from his letters, to prevail upon the earl to submit to be tried, and to keep him in temper during his trial, *lest he*, as the king expressed it in an apostile on Sir Francis's letter of the 28th of April, 1616, *upon the one part commit unpardonable errors, and I on the other seem to punish him in the spirit of revenge.* See more on this subject in Mr. Mallet's *Life of the Lord Chancellor Bacon*, who closes his remarks with a reference to a letter of Somerset to the king, printed in the *Cabala*, and written in a high style of expostulation, and showing, through the affected obscurity of some expressions, that there was an important secret in his keeping, of which his majesty dreaded a discovery. The earl and his lady were released from their confinement in the Tower in January, 1621-2, the latter dying August 22, 1632, leaving one daughter, Anne, then sixteen years of age, afterwards married to William, Lord Russel, afterwards earl, and at last Duke of Bedford. The Earl of Somerset survived his lady several years, and died in July, 1645, being interred on the 17th of that month in the church of St. Paul's, Covent Garden.

not to expatiate, nor digresse upon any other points, that maye not serve clearlie for probation or inducement of that point, quhairof he is accused.

The first to prove the malice, which Somerset bore to Overbury, which was the motive and ground of the impoisonment.

The second is to prove the preparations unto the impoisonment, by plotting his imprisonment, placing his keepers, stopping access of friends, etc.

The third is the acts of the impoisonments themselves.

And the fourth is acts subsequent, which do vehemently argue him to be guilty of the impoisonment.

For the first two heads, upon conference, whereunto I called Serjeant Montagu and Serjeant Crew, I have taken them two heads to myself; the third I have allotted to Serjeant Montagu; and the fourth to Serjeant Crew.

In the first of these, to my understanding, is the only tenderness: for on the one side, it is most necessary to lay a foundation, that the malice was a deep malice, mixed with fear, and not only matter of revenge upon his lordship's quarrel; for "periculum periculo vincitur;" and the malice must have a proportion to the effect of it, which was the impoisonment: so that if this foundation be not laid, all the evidence is weakened.

On the other side, if I charge him, or would charge him, by way of aggravation, with matters tending to disloyalty or treason, then he is like to grow desperate.

Therefore I shall now set down perspicuously what course I mean to hold, that your majesty may be pleased to direct and correct it, preserving the strength of the evidence: and this I shall now do, but shortly and without ornament.

First, I shall read some passages of Overbury's letters, namely these: "Is this the fruit of nine years' love, common secrets, and common dangers?" In another letter: "Do not drive me to extremity to do that, which you and I shall be sorry for." In another letter: "Can you forget him, between whom such secrets of all kinds have passed?" etc.

Then will I produce Simcock, who deposeth from Weston's speech, that Somerset told Weston, that, "if ever Overbury came out of prison, one of them must die for it."

Then I will say what these secrets were. I mean not to enter into particulars, nor to charge him with disloyalty, because he stands to be tried for his life upon another crime. But yet by some taste, that I shall give to the peers in general, they may conceive of what nature those secrets may be. Wherein I will take it for a thing notorious, that Overbury was a man, that always carried himself insolently, both towards the queen, and towards the late prince: that he was a man, that carried Somerset on in courses separate and opposite to the privy council: that he was a man of nature fit to be an incendiary of a state: full of bitterness and wildness of speech and project: that he was thought also lately to govern Somerset, insomuch that in his own letters he vaunted, "that from him proceeded Somerset's fortune, credit, and understanding."

This course I mean to run in a kind of generality, putting the imputations rather upon Overbury than Somerset; and applying it, that such a nature was like to hatch dangerous secrets and practices. I mean to show likewise what jargons there were and ciphers between them, which are great badges of secrets of estate, and used either by princes and their ministers of state, or by such as practise against princes. That your majesty was called *Julius* in respect of your empire; the queen *Agrippina*, though Somerset now saith it was *Livia*, and that my Lady of Suffolk was *Agrippina*; the Bishop of Canterbury *Unctius*; Northampton, *Dominic*; Suffolk, first *Lerma*, after *Wolsey*; and many others; so as it appears they made a play both of your court and kingdom; and that their imaginations wrought upon the greatest men and matters.

Neither will I omit Somerset's breach of trust to your majesty, in trusting Overbury with all the despatches, things, wherewith your council of estate itself was not many times privy or acquainted; and yet, this man must be admitted to them, not cursorily, or by glimpses, but to have them by him, to copy them, to register them, to table them, etc.

Apostyle of the king.

This evidence cannot be given in without making me his accuser, and that upon a very slight ground. As for all the subsequent evidences, they are all so little evident, as una litura *may serve thaime all.*

I shall also give in evidence, in this place, the slight account of that letter, which was brought to Somerset by Ashton, being found in the fields soon after the late prince's death, and was directed to Antwerp, containing these words, "that the first branch was cut from the tree, and that he should, ere long, send happier and joyfuller news."

Which is a matter I would not use, but that my Lord Coke, who hath filled this part with many frivolous things, would think all lost, except he hear somewhat of this kind. But, this it is to come to the leavings of a business.

Nothing to Somerset, and de-

And, for the rest of that kind, as to speak of that par-

clared by Franklin after condemnation.

ticular, that Mrs. Turner did at Whitehall show to Franklin the man, who, as he said, poisoned the prince, which, he says, was a physician with a red beard.

Nothing to Somerset, and a loose conjecture.

That there was a little picture of a young man in white wax, left by Mrs. Turner with Forman the conjurer, which my Lord Coke doubted was the prince.

No better than a gazette, or passage of Gallo Belgicus.

That the Viceroy of the Indies at Goa reported to an English factor, that Prince Henry came to an untimely death by a mistress of his.

Nothing yet proved against Lowbell.

That Somerset with others, would have preferred Lowbell the apothecary to Prince Charles.

Nothing to Somerset.

That the countess laboured Forman and Gresham, the conjurers, to enforce the queen by witchcraft to favour the countess.

Declared by Franklin after condemnation.

That the countess told Franklin, that when the queen died, Somerset should have Somerset House.

Nothing to Somerset.

That Northampton said, the prince, if ever he came to reign, would prove a tyrant.

Nothing to Somerset.

That Franklin was moved by the countess to go to the Palsgrave, and should be furnished with money.

The particular reasons, why I omit them, I have set in the margin; but the general is partly to do a kind of right to justice, and such a solemn trial, in not giving that in evidence, which touches not the delinquent, or is not of weight; and partly to observe your majesty's direction, to give Somerset no just occasion of despair or flushes.

But, I pray your majesty to pardon me, that I have troubled your majesty with repeating them, lest you should hear hereafter, that Mr. Attorney hath omitted divers material parts of the evidence.

Endorsed,

Somerset's business and charge, with his majesty's postiles.

TO SIR GEORGE VILLIERS.

SIR,

Your man made good haste; for he was with me yesterday about ten of the clock in the forenoon. Since I held him.

The reason, why I set so small a distance of time between the use of the little charm, or, as his majesty better terms it, "the evangile,"* and the day of his trial† notwithstanding his majesty's being so far off, as advertisement of success and order thereupon could not go and come between, was chiefly, for that his majesty, from whom the overture of that first moved, did write but a few hours, that this should be done, which I turned into days. Secondly, because the hope I had of effect by that mean, was rather of attempting him at his arraignment, than of confession before his arraignment. But I submit it to his majesty's better judgment.

The person, by your first description, which was without name, I thought had been meant of Packer:‡ but now perceive it is another, to me unknown, but, as it seemeth, very fit. I doubt not but he came with sufficient warrant to Mr. Lieutenant to have access. In this I have no more to do, but to expect to hear from his majesty how this worketh.

The letter from his majesty to myself and the serjeants I have received, such as I wished; and I will speak with the commissioners, that he may, by the lieutenant, understand his majesty's care of him, and the tokens herein of his majesty's compassion towards him.

I ever had a purpose to make use of that circumstance, that Overbury, the person murdered, was his majesty's prisoner in the Tower; which indeed is a strong pressure of his majesty's justice. For Overbury is the first prisoner murdered in the Tower, since the murder of the young princes by Richard the Third, the tyrant.

I would not trouble his majesty with any points of preamble, nor of the evidence itself, more than that part nakedly, wherein was the tenderness, in which I am glad his majesty, by his postils, which he returned to me, approveth my judgment.

Now I am warranted, I will not stick to say openly, I am commanded, not to exasperate, nor to aggravate the matter in question of the impoisonment with any other collateral charge of disloyalty, or otherwise; wherein, besides his majesty's principal intention, there will be some use to save the former bruits of Spanish matters.

There is a direction given to Mr. Lieutenant by my lord chancellor and myself, that as yesterday Mr. Whiting§ the preacher, a discreet man, and one that was used to Helwisse, should preach

* Cicero, Epist. ad Atticum, Lib. XIII. Ep. 40, uses this word, εὐαγγέλια; which signifies both good news, and the reward given to him who brings good news. See Lib. II. Epist. 3.

† The Earl of Somerset's.

‡ John, of whom there are several letters in Winwood's *Memorials*, vol. II.

§ John Whiting, D. D. rector of St. Martin Vintry, in London, and Vicar of East-Ham in Essex, prebendary of Baldstreet in the church of St. Paul's, and chaplain to King James I. He attended Sir Gervase Helwisse, who had been Lieutenant of the Tower, at his execution upon Tower-Hill, on Monday the 20th of November, 1615, for the murder of Sir Thomas Overbury

before the lady,* and teach her, and move her generally to a clear confession. That after the same preacher should speak as much to him at his going away in private: and so proof to be made, whether this good mean, and the last night's thoughts, will produce any thing. And that this day the lieutenant should declare to her the time of her trial, and likewise of his trial, and persuade her, not only upon Christian duty, but as good for them both, that she deal clearly touching him, whereof no use can be made, nor need to be made, for evidence, but much use may be made for their comfort.

It is thought, at the day of her trial the lady will confess the indictment; which if she do, no evidence ought to be given. But because it shall not be a dumb show, and for his majesty's honour in so solemn an assembly, I purpose to make a declaration of the proceedings of this great work of justice, from the beginning to the end, wherein, nevertheless, I will be careful no ways to prevent or discover the evidence of the next day.

In this my lord chancellor and I have likewise used a point of providence: for I did forecast, that if in that narrative, by the connection of things, any thing should be spoken, that should show him guilty, she might break forth into passionate protestations for his clearing; which, though it may be justly made light of, yet it is better avoided. Therefore my lord chancellor and I have devised, that upon the entrance into that declaration she shall, in respect of her weakness, and not to add farther affliction, be withdrawn.

It is impossible, neither is it needful, for me, to express all the particulars of my care in this business. But I divide myself into all cogitations as far as I can foresee; being very glad to find, that his majesty doth not only accept well of my care and advices, but that he applieth his directions so fitly, as guideth me from time to time.

I have received the commissions signed.

I am not forgetful of the goods and estate of Somerset, as far as is seasonable to inquire at this time. My Lord Coke taketh upon him to answer for the jewels, being the chief part of his moveable value: and this, I think, is done with his majesty's privity. But my Lord Coke is a good man to answer for it.

God ever preserve and prosper you. I rest
Your true and devoted servant,
FR. BACON.

May 10, Friday, at 7 of the clock in the morning, [1616.]

TO THE KING.†

MAY IT PLEASE YOUR MOST EXCELLENT MAJESTY,

I do very much thank your majesty for your letter, and think myself much honoured by it. For though it contain some matter of dislike, in which respect it hath grieved me more than any event, which hath fallen out in my life; yet because I know reprehensions from the best masters to the best servants are necessary; and that no chastisement is pleasant for the time, but yet worketh good effects; and for that I find intermixed some passages of trust and grace; and find also in myself inwardly sincerity of intention, and conformity of will, howsoever I may have erred; I do not a little comfort myself, resting upon your majesty's accustomed favour; and most humbly desiring, that any one of my particular notions may be expounded by the constant and direct course, which, your majesty knoweth, I have ever held in your service.

And because it hath pleased your majesty, of your singular grace and favour, to write fully and freely unto me; it is duty and decorum in me not to write shortly to your majesty again, but with some length; not so much by way of defence or answer, which yet, I know, your majesty would always graciously admit; as to show, that I have, as I ought, weighed every word of your majesty's letter.

First, I do acknowledge, that this match of Sir John Villiers is "magnum in parvo" in both senses, that your majesty speaketh. But your majesty perceiveth well, that I took it to be in a farther degree, "majus in parvo," in respect of your service. But since your majesty biddeth me to confide upon your act of empire, I have done. For, as the Scripture saith, "to God all things are possible;" so certainly to wise kings much is possible. But for that second sense, that your majesty speaketh of, "magnum in parvo," in respect of the stir; albeit it being but a most lawful and ordinary thing, I most humbly pray your majesty to pardon me, if I signify to you, that we here take the loud and vocal, and as I may call it, streperous carriage to have been far more on the other side, which indeed is inconvenient, rather than the thing itself.

Now, for the manner of my affection to my Lord of Buckingham, for whom I would spend my life, and that which is to me more, the cares of my life; I must humbly confess, that it was in this a little parent-like, this being no other term, than his lordship hath heretofore vouchsafed to my counsels; but in truth, and it please your majesty, without any grain of disesteem for his lordship's discretion. For I know him to be naturally a wise man, of a sound and staid wit, as I ever said unto your majesty. And, again, I know he hath the best tutor in Europe. But yet I was afraid, that the height of his fortune might make him too secure; and as the proverb is, a looker-on sometimes seeth more than a gamester.

* Frances, Countess of Somerset.

† This letter appears, from the endorsement of the king's answer to it, to have been written at Gorhambury, July 25, 1617. That printed with this date in his Works, should be August 2, 1617, as I find by the original draught of it.

For the particular part of a true friend, which your majesty witnesseth, that the earl hath lately performed towards me, in palliating some errors of mine; it is no new thing with me to be more and more bound to his lordship; and I am most humbly to thank, whatsoever it was, both your majesty and him; knowing well, that I may, and do commit many errors, and must depend upon your majesty's gracious countenance and favour for them, and shall have need of such a friend near your majesty. For I am not so ignorant of mine own case, but that I know I am come in with as strong an envy of some particulars, as with the love of the general.

For my opposition to this business, which, it seemeth, hath been informed your majesty, I think it was meant, if it be not a thing merely feigned, and without truth or ground, of one of these two things; for I will dissemble nothing with your majesty. It is true, that in those matters, which, by your majesty's commandment and reference, came before the table concerning Sir Edward Coke, I was sometimes sharp, it may be too much; but it was with end to have your majesty's will performed; or else, when methought he was more peremptory than became him, in respect of the honour of the table. It is true also, that I dislike the riot or violence, whereof we of your council gave your majesty advertisement by our joint letter: and I disliked it the more, because he justified it to be law; which was his old song. But in that act of council, which was made thereupon, I did not see but all my lords were as forward as myself, as a thing most necessary for preservation of your peace, which had been so carefully and firmly kept in your absence. And all this had a fair end, in a reconcilement made by Mr. Attorney,* whereby both husband and wife and child should have kept together. Which, if it had continued, I am persuaded the match had been in better and fairer forwardness, than now it is.

Now, for the times of things, I beseech your majesty to understand that which my Lord of Buckingham will witness with me, that I never had any word of letter from his lordship of the business, till I wrote my letter of advice; nor again, after my letter of advice, till five weeks after, which was now within this sennight. So that although I did in truth presume, that the earl would do nothing without your majesty's privity; yet I was in some doubt, by this his silence of his own mind, that he was not earnest in it, but only was content to embrace the officious offers and endeavours of others.

But, to conclude this point, after I had received, by a former letter of his lordship, knowledge of his mind, I think Sir Edward Coke himself, the last time he was before the lords, might particularly perceive an alteration in my carriage. And now that your majesty hath been pleased to open yourself to me, I shall be willing to further the match by any thing, that shall be desired of me, or that is in my power.

And whereas your majesty conceiveth some dregs of spleen in me by the word "Mr. Bacon;" truly it was but to express in thankfulness the comparative of my fortune unto your majesty, the author of the latter, to show how little I needed to fear, while I had your favour. For, I thank God, I was never vindictive nor implacable.

As for my opinion of prejudice to your majesty's service, as I touched it before, I have done; I do humbly acquiesce in your majesty's satisfaction, and rely upon your majesty's judgment, who unto judgment have also power, so to mingle the elements, as may conserve the fabric.

For the interest, which I have in the mother, I do not doubt but it was increased by this, that I in judgment, as I then stood, affected that which she did in passion. But I think the chief obligation was, that I stood so firmly to her in the matter of her assurance, wherein I supposed I did your majesty service, and mentioned it in a memorial of council-business, as half craving thanks for it. And sure I am now, that, and the like, hath made Sir Edward Coke a convert, as I did write to your majesty in my last.

For the collation of the two spirits, I shall easily subscribe to your majesty's answer; for Solomon were no true man, if in matter of malice the woman should not be the superior.

To conclude, I have gone through, with the plainness of truth, the parts of your majesty's letter: very humbly craving pardon for troubling your majesty so long; and most humbly praying your majesty to continue me in your grace and favour, which is the fruit of my life upon the root of a good conscience. And although time in this business have cast me upon a particular, which, I confess, may have probable show of passion or interest; yet God is my witness, that the thing, that most moved me, was an anxious and solicitous care of your majesty's state and service, out of consideration of the time past and present.

God ever preserve and bless your majesty, and send you a joyful return after your prosperous journey.

ADVICE TO THE KING FOR REVIVING THE COMMISSION OF SUITS.

That, which for the present I would have spoken with his majesty about, as a matter wherein time may be precious, being upon the tenderest point of all others. For, though the particular occasion may be despised, and yet

* Sir Henry Yelverton.

nothing ought to be despised in this kind, yet the counsel thereupon I conceive to be most sound and necessary, to avoid future perils.

There is an examination taken within these few days, by Mr. Attorney, concerning one Baynton, or Baynham, for his name is not yet certain, attested by two witnesses, that the said Baynton, without any apparent show of being overcome with drink, otherwise than so as might make him less wary to keep secrets, said, that he had been lately with the king, to petition him for reward of service; which was denied him. Whereupon it was twice in his mind to have killed his majesty. The man is not yet apprehended, and said by some to be mad, or half-mad; which, in my opinion, is not less dangerous; for such men commonly do most mischief; and the manner of his speaking imported no distraction. But the counsel I would out of my care ground hereupon is, that his majesty would revive the commission for suits, which hath been now for these three years, or more, laid down. For it may prevent any the like wicked cogitations, which the devil may put into the mind of a roarer or swaggerer, upon a denial: and, besides, it will free his majesty from much importunity, and save his coffers also. For I am sure when I was a commissioner, in three whole years' space there passed scarce ten suits that were allowed. And I doubt now, upon his majesty's coming home from this journey, he will be much troubled with petitions and suits; which maketh me think this remedy more seasonable. It is not meant, that suits generally should pass that way, but only such suits as his majesty would be rid on.

Endorsed,

September 21, 1617.

To revive the commission of suits. For the king.

TO THE EARL OF BUCKINGHAM.

My very good Lord,

It may please your lordship to let his majesty understand, that I have spoken with all the judges, signifying to them his majesty's pleasure touching the commendams. They all "una voce" did reaffirm, that his majesty's powers, neither the power of the crown, nor the practised power by the archbishop, as well in the commendam "ad recipiendum," as the commendam "ad retinendum," are intended to be touched; but that the judgment is built upon the particular defects and informalities of this commendam now before them. They received with much comfort, that his majesty took so well at their hands the former stay, and were very well content and desirous, that when judgment is given, there be a faithful report made of the reason thereof.

The accounts of the summer-circuits, as well as that of the lent-circuit, shall be ready against his majesty's coming. They will also be ready with some account of their labours concerning Sir Edward Coke's *Reports:* wherein I told them his majesty's meaning was, not to disgrace the person, but to rectify the work, having in his royal contemplation rather posterity than the present.

The two points touching the peace of the middle shires, I have put to a consult with some selected judges.

The cause of the Egertons I have put off, and shall presently enter into the treaty of accord, according to his majesty's commandment, which is well tasted abroad, in respect of his compassion towards those ancient families.

God ever preserve and prosper your lordship, according to the faithful and fervent wishes of

Your lordship's true friend and devoted servant,

Fr. Bacon.

York House, October 11, 1617.

TO THE LORD KEEPER.*

My honourable Lord,

I have delivered the judges' advice, touching the middle shires, unto his majesty, who liketh it very well. As for the point of law, his majesty will consider of it at more leisure, and then send you his opinion thereof. And so I rest

Your lordship's faithful friend and servant,

G. Buckingham.

Hinchinbroke, the 22d of Oct. 1617.

TO THE LORD KEEPER.†

My honourable Lord,

Understanding, that Thomas Hukeley, a merchant of London, of whom I have heard a good report, intendeth to bring before your lordship in chancery a cause depending between him, in right of his wife, daughter of William Austen, and one John Horsmendon, who married another daughter of the said Austen; I have thought fit to desire your lordship to give the said Thomas Hukeley a favourable hearing when his cause shall come before you; and so far to respect him for my sake, as your lordship shall see him grounded upon equity and reason; which is no more than, I assure myself, your lordship will grant readily, as it is desired by

Your lordship's faithful friend and servant,

G. Buckingham

Endorsed, November 17, 1617.

* Harl. MSS. vol. 7006. † Ibid

TO THE LORD CHANCELLOR.*

My honourable Lord,

I have heretofore recommended unto your lordship the determination of the cause between Sir Rowland Egerton and Edward Egerton,† who, I understand, did both agree, being before your lordship, upon the values of the whole lands. And as your lordship hath already made so good an entrance into the business, I doubt not but you will be as noble in furthering the full agreement between the parties: whereunto, I am informed, Sir Rowland Egerton is very forward, offering on his part that, which to me seemeth very reasonable, either to divide the lands, and his adverse party to choose; or the other to divide, and he to choose. Whereupon my desire to your lordship is, that you would accordingly make a final end between them, in making a division, and setting forth the lands, according to the values agreed upon by the parties themselves. Wherein, besides the charitable work your lordship shall do in making an end of a controversy between those, whom name and blood should tie together, and keep in unity, I will acknowledge your favour as unto myself, and will ever rest

Your lordship's faithful servant,

G. Buckingham.

Theobalds's,
January 9, 1617.

TO SIR HENRY YELVERTON, ATTORNEY-GENERAL.

Mr. Attorney,

Whereas, there dependeth before me in chancery a great cause of tithes concerning the benefices of London, though in a particular, yet, by consequence, leading to a general; his majesty. out of a great religious care of the state, both of church and city, is graciously pleased, that before any judicial sentence be pronounced in chancery, there be a commission directed unto me, the lord chancellor, the lord treasurer, the lord privy-seal, and the lord chamberlain; and likewise to the lord archbishop, the Lord Bishop of Winchester,‡ and the Bishop of Ely,§ and also to the master of the rolls,‖ the two lord chief justices,¶ Justice Dodderidge, and Justice Hutton, who formerly assisted me in the cause, to treat of some concord in a reasonable moderation between the ministers and the mayor and the commonalty of London in behalf of the citizens; and to make some pact and transaction between them by consent, if it may be; or otherwise to hear and certify their opinion touching the cause, that thereupon his majesty may take such farther order, by directing of a proceeding in chancery, or by some other course, as to his wisdom shall seem fit.

You will have care to draw the commission with some preface of honour to his majesty, and likewise to insert in the beginning of the commission, that it was "de advisamento cancellarii," (as it was indeed,) lest it should seem to be taken from the court. So I commit you to God's, etc.

Fr. Bacon, Canc.

Jan. 19, 1617.

* Sir Francis Bacon had that title given him January 4.

† This was one of the causes mentioned in the charge of the House of Commons against the Lord Bacon; in his answer to which, he acknowledged, that some days after perfecting his award, which was done with the advice and consent of the Lord Chief Justice Hobart, and publishing it to the parties, he received 300*l.* of Mr. Edward Egerton, by whom, soon after his coming to the seal, he had likewise been presented with 400*l.* in a purse.

‡ Dr. James Montagu.

§ Dr. Lancelot Andrews.

‖ Sir Julius Cæsar.

¶ Sir Henry Montagu of the king's bench, and Sir Henry Hobart of the common pleas.

TO THE LORD CHANCELLOR.*

My honourable Lord,

I thank your lordship for your favour to Sir George Tipping, in giving liberty unto him to make his appearance before you after the holydays, at my request; who, as I understand by some friends of mine, who moved me to recommend him to your lordship's favour, is willing to conform himself in performance of the decree made in the chancery by your lordship's predecessor, but that he is persuaded, that presently, upon the performance thereof, his son will make away the land that shall be conveyed unto him: which being come to Sir George from his ancestors, he desireth to preserve to his posterity. I desire your lordship's farther favour therefore unto him, that you will find out some course, how he may be exempted from that fear of the sale of his lands, whereof he is ready to acknowledge a fine to his son, and to his heirs by Anne Pigot; and, they failing, to his son's heirs males, and for want thereof, to any of his son's or brethren's heirs males, and so to the heirs general of his father and himself, by lineal descent, and the remainder to the crown. This offer, which seemeth very reasonable, and for his majesty's advantage, I desire your lordship to take into your consideration, and to show him what favour you may for my sake; which I will readily acknowledge, and ever rest

Your lordship's faithful servant,

G. Buckingham.

Newmarket, Jan. 23, 1617.

TO THE LORD CHANCELLOR.†

My honourable Lord,

Understanding that there is a suit depending before your lordship, between Sir Rowland Cot-

* Harl. MSS. vol. 7006.

† Harl. MSS. vol. 7006.

ton,* plaintiff, and Sir John Gawen, defendant, which is shortly to come to a hearing; and having been likewise informed, that Sir Rowland Cotton hath undertaken it in the behalf of certain poor people; which charitable endeavour of his, I assure myself, will find so good acceptation with your lordship, that there shall be no other use of recommendation; yet, at the earnest request of some friends of mine, I have thought fit to write to your lordship in his behalf, desiring you to show him what favour you lawfully may, and the cause may bear, in the speedy despatch of his business; which I shall be ever ready to acknowledge, and rest

Your lordship's most devoted to serve you,

G. BUCKINGHAM.

Whitehall, April 20, 1618.

TO THE LORD CHANCELLOR.†

MY HONOURABLE GOOD LORD,

Whereas, in Mr. Hansbye's cause,‡ which formerly, by my means, both his majesty and myself recommended to your lordship's favour, your lordship thought good, upon a hearing thereof, to decree some part for the young gentleman, and to refer to some masters of the chancery, for your farther satisfaction, the examination of witnesses to this point; which seemed to your lordship to be the main thing your lordship doubted of, whether or no the leases, conveyed by old Hansbye to young Hansbye by deed, were to be liable to the legacies, which he gave by will; and that now I am credibly informed, that it will appear upon their report, and by the depositions of witnesses, without all exception, that the said leases are no way liable to those legacies; these shall be earnestly to entreat your lordship, that upon consideration of the report of the masters, and depositions of the witnesses, you will, for my sake, show as much favour and expedition to young Mr. Hansbye in this cause, as the justness thereof will permit. And I shall receive it at your lordship's hands as a particular favour.

So I take my leave of your lordship, and rest

Your lordship's faithful friend and servant,

G. BUCKINGHAM

Greenwich, June 12, 1618.

TO THE LORD CHANCELLOR.*

MY HONOURABLE LORD,

Understanding, that the cause depending in the chancery between the Lady Vernon and the officers of his majesty's household is now ready for decree; though I doubt not, but, as his majesty hath been satisfied of the equity of the cause on his officers' behalf, who have undergone the business, by his majesty's command, your lordship will also find their cause worthy of your favour: yet, I have thought fit once again to recommend it to your lordship, desiring you to give them a speedy end of it, that both his majesty may be freed from farther importunity, and they from the charge and trouble of following it: which I will be ever ready to acknowledge as a favour done unto myself, and always rest

Your lordship's faithful friend and servant,

G. BUCKINGHAM.

Greenwich, June 15, 1618.

TO THE LORD CHANCELLOR.†

MY HONOURABLE LORD,

I wrote unto your lordship lately in the behalf of Sir Rowland Cotton, that then had a suit in dependence before your lordship and the rest of my lords in the Star Chamber. The cause, I understand, hath gone contrary to his expectation; yet, he acknowledges himself much bound to your lordship for the noble and patient hearing he did then receive; and he rests satisfied, and I much beholden to your lordship, for any favour it pleased your lordship to afford him for my cause. It now rests only in your lordship's power for the assessing of costs; which, because, I am certainly informed, Sir Rowland Cotton had just cause of complaint, I hope your lordship will not give any against him. And I do the rather move your lordship to respect him in it, because it concerns him in his reputation, which I know he tenders, and not the money which might be imposed upon him; which can be but a trifle. Thus presuming of your lordship's favour herein, which I shall be ready ever to account to your lordship for, I rest

Your lordship's most devoted to serve you,

G. BUCKINGHAM.

June 19, 1618.

* A gentleman eminent for his learning, especially in the Hebrew language, in which he had been instructed by the famous Hugh Broughton, who died in 1612. He was son of Mr. William Cotton, citizen and draper of London, and had an estate at Bellaport in Shropshire, where he resided, till he came to live at London at the request of Sir Allen Cotton, his father's younger brother, who was lord mayor of that city in 1625. Sir Rowland was the first patron of the learned Dr. Lightfoot, and encouraged him in the prosecution of his studies of the Hebrew language and antiquities

† Harl. MSS. vol. 7006.

‡ This seems to be one of the causes, on account of which Lord Bacon was afterwards accused by the House of Commons; in answer to whose charge he admits, that in the cause of Sir Ralph Hansbye there being two decrees, one for the inheritance, and the other for goods and chattels; some time after the first decree, and before the second, there was 500*l.* delivered to him by Mr. Toble Matthew; nor could his lordship deny, that this was upon the matter "pendente lite."

* Harl MSS. vol. 7006.

† Ibid.

TO THE LORD CHANCELLOR.*

My honourable Lord,

I have been desired by some friends of mine, in the behalf of Sir Francis Englefyld, to recommend his cause so far unto your lordship, that a peremptory day being given by your lordship's order for the perfecting of his account, and for the assignment of the trust, your lordship would take such course therein, that the gentleman's estate may be redeemed from farther trouble, and secured from all danger, by engaging those, to whom the trust is now transferred by your lordship's order, to the performance of that, whereunto he was tied. And so not doubting but your lordship will do him what lawful favour you may herein, I rest

Your lordship's faithful friend and servant,

G. Buckingham.

Endorsed,

Received Oct. 14, 1618.

TO THE KING, CONCERNING THE FORM AND MANNER OF PROCEEDING AGAINST SIR WALTER RALEGH.†

May it please your most excellent Majesty,

According to your commandment given unto us, we have, upon divers meetings and conferences, considered what form and manner of proceeding against Sir Walter Ralegh might best stand with your majesty's justice and honour, if you shall be pleased, that the law shall pass upon him.

And, first, we are of opinion, that Sir Walter Ralegh being attainted of high treason, which is the highest and last work of law, he cannot be drawn in question judicially for any crime or offence since committed. And, therefore, we humbly present two forms of proceeding to your majesty; the one, that together with the warrant to the lieutenant of the Tower, if your majesty shall so please, for his execution, to publish a narrative in print, of his late crimes and offences: which, albeit your majesty is not bound to give an account of your actions in these cases to any but only to God alone, we humbly offer to your majesty's consideration, as well in respect of the great effluxion of time since his attainder, and of his employment by your majesty's commission, as for that his late crimes and offences are not yet publicly known. The other form, whereunto, if your majesty so please, we rather incline, is, that where your majesty is so renowned for your justice, it may have such a proceeding, as is nearest to legal proceeding; which is, that he be called before the whole body of your council of state, and your principal judges, in your council chamber; and that some of the nobility and gentlemen of quality be admitted to be present to hear the whole proceeding, as in like cases hath been used. And after the assembly of all these, that some of your majesty's counsellors of state, that are best acquainted with the case, should openly declare, that this form of proceeding against Sir Walter is holden, for that he is civilly dead. After this your majesty's council learned to charge his acts of hostility, depredation, abuse as well of your majesty's commission, as of your subjects under his charge, impostures, attempt of escape, and other his misdemeanors. But for that, which concerns the French, wherein he was rather passive than active, and without which the charge is complete, we humbly refer to your majesty's consideration, how far that shall be touched. After which charge so given, the examinations read, and Sir Walter heard, and some to be confronted against him, if need be, then he is to be withdrawn and sent back; for that no sentence is, or can be, given against him. And after he is gone, then the lords of the council and judges to give their advice to your majesty, whether in respect of these subsequent offences upon the whole matter, your majesty, if you so please, may not with justice and honour give warrant for his execution upon his attainder. And of this whole proceeding we are of opinion, that a solemn act of council should be made, with a memorial of the whole presence. But before this be done, that your majesty may be pleased to signify your gracious direction herein to your council of state; and that your council learned, before the calling of Sir Walter, should deliver the heads of the matter, together with the principal examinations touching the same, wherewith Sir Walter is to be charged, unto them, that they may be perfectly informed of the true state of the case, and give their advice accordingly. All which, nevertheless, we, in all humbleness, present and submit to your princely wisdom and judgment, and shall follow whatsoever it shall please your majesty to direct us herein, with all dutiful readiness.

Your majesty's most humble
and faithful servants, etc.

York House, this 18th of October, 1618.

* Harl. MSS. vol. 7006.

† He was beheaded October 29, 1618, the day of the inauguration of the Lord Mayor of London.

TO THE LORD CHANCELLOR.*

My honourable Lord,

Whereas, there is a cause depending in the court of chancery between one Mr. Francis Foliambe and Francis Hornsby, the which already hath received a decree, and is now to have another hearing before yourself; I have thought fit to desire you to show so much favour therein, seeing it concerns the gentleman's whole estate, as to make a full arbitration and final end, either by taking

* Harl. MSS. vol. 7006.

the pains in ending it yourself, or preferring it to some other, whom your lordship shall think fit: which I shall acknowledge as a courtesy from your lordship; and ever rest

Your lordship's faithful friend and servant,

G. BUCKINGHAM.

Hinchinbroke, the 22d of October, 1618.

TO THE MARQUIS OF BUCKINGHAM.

MY VERY GOOD LORD,

We have put the Declaration* touching Raleigh to the press, with his majesty's additions, which were very material, and fit to proceed from his majesty.

For the prisoners, we have taken an account, given a charge, and put some particulars in examination for punishment and example.

For the pursuivants, we stayed a good while for Sir Edward Coke's health; but he being not yet come abroad, we have entered into it; and we find faults, and mean to select cases for example: but in this swarm of priests and recusants we are careful not to discourage in general. But the punishment of some that are notoriously corrupt, concerned not the good, and will keep in awe those that are but indifferent.

The balance of the king's estate is in hand, whereof I have great care, but no great help.

The sub-committees for the several branches of treasure are well chosen and charged.

This matter of the king's estate for means is like a quarry, which digs and works hard; but then, when I consider it buildeth, I think no pains too much; and after term it shall be my chief care.

For the mint, by my next I will give account; for our day is Wednesday.

God ever preserve and prosper you.

Your lordship's

FR. VERULAM, Canc.

November 22, 1618.

Endorsed,

Of council business.

TO THE LORD CHANCELLOR.†

MY HONOURABLE LORD,

I having understood by Dr. Steward, that your lordship hath made a decree against him in the chancery, which he thinks very hard for him to perform; although I know it is unusual to your lordship to make any alterations, when things are so far past; yet, in regard I owe him a good turn, which I know not how to perform but this way, I desire your lordship, if there be any place left for mitigation, your lordship would show him what favour you may, for my sake, in his desires, which I shall be ready to acknowledge as a great courtesy done unto myself; and will ever rest

Your lordship's faithful friend and servant,

G. BUCKINGHAM.

Newmarket, the 2d December, 1618.

NOTES OF A SPEECH OF THE LORD CHANCELLOR IN THE STAR CHAMBER, IN THE CAUSE OF SIR HENRY YELVERTON, ATTORNEY-GENERAL.*

SORRY for the person, being a gentleman that I lived with in Gray's Inn; served with him when I was attorney; joined with him in many services, and one that ever gave me more attributes in public, than I deserved; and, besides, a man of very good parts, which with me is friendship at first sight; much more, joined with so ancient an acquaintance.

But, as a judge, I hold the offence very great, and that without pressing measure; upon which I will only make a few observations, and so leave it.

1. First I observe the danger and consequence of the offence: for if it be suffered, that the learned council shall practise the art of multiplication upon their warrants, the crown will be destroyed in small time. The great seal, the privy seal, signet, are solemn things; but they follow the king's hand. It is the bill drawn by the learned council and the docket, that leads the king's hand.

2. Next I note the nature of the defence. As, first, that it was error in judgment: for this surely, if the offence were small though clear, or great, but doubtful, I should hardly sentence it. For it is hard to draw a straight line by steadiness of hand; but it could not be the swerving of the hand. And herein I note the wisdom of the law of England, which termeth the highest contempts and excesses of authority "misprisions;" which, if you take the sound and derivation of the words, is but "mistaken:" but if you take the use and acceptation of the word, it is high and heinous contempts and usurpations of authority; whereof the reason I take to be, and the name excellently imposed; for that main mistaking, it is ever joined with contempt; for he that reveres, will not easily mistake; but he that slights, and thinks

* *Declaration of the Demeanor and Carriage of Sir Walter Raleigh, Knight, as well in his Voyage, as in and since his Return, etc.*, printed at London, 1618, in quarto.

† Harl. MSS. vol. 7006.

* He was prosecuted in the Star Chamber, for having passed certain clauses in a charter, lately granted to the city of London, not agreeable to his majesty's warrant, and derogatory to his honour. But the chief reason of the severity against him was thought to be the Marquis of Buckingham's resentment against him, for having opposed, according to the duty of his office, some oppressive, if not illegal, patents, which the projectors of those times were busy in preparing.

more of the greatness of his place than of the duty of his place, will soon commit misprisions.

Endorsed.

Star Chamber, October 24, 1620. Notes upon Mr. Attorney's cause.

TO THE MARQUIS OF BUCKINGHAM.

My very good Lord,

It may be, your lordship will expect to hear from me what passed yesterday in the Star Chamber, touching Yelverton's cause, though we desired Secretary Calvert to acquaint his majesty therewith.

To make short, at the motion of the attorney, in person at the bar, and at the motion of my lord steward* in court, the day of proceeding is deferred till the king's pleasure is known. This was against my opinion then declared plain enough; but put to votes, and ruled by the major part, though some concurred with me.

I do not like of this course, in respect that it puts the king in a strait; for either the note of severity must rest upon his majesty, if he go on; or the thanks of clemency is in some part taken away, if his majesty go not on.

I have "cor unum et via una;" and therefore did my part as a judge and the king's chancellor. What is farther to be done, I will advise the king faithfully, when I see his majesty and your lordship. But before I give advice, I must ask a question first.

God ever preserve and prosper you.

Your lordship's most obliged friend
and faithful servant,
Fr. Verulam, Canc.

October 28, 1620.

LORD CHANCELLOR BACON TO THE MARQUIS OF BUCKINGHAM.

My very good Lord,

Yesternight we made an end of Sir Henry Yelverton's cause. I have almost killed myself with sitting almost eight hours. But I was resolved to sit it through. He is sentenced to imprisonment in the Tower during the king's pleasure. The fine of 4000*l.* and discharge of his place, by way of opinion of the court, referring it to the king's pleasure. How I stirred the court, I leave it to others to speak; but things passed to his majesty's great honour. I would not for any thing but he had made his defence; for many chief points of the charge were deeper printed by the defence. But yet I like it not in him; the less because he retained Holt, who is ever retained but to play the fool. God ever prosper you.

Your lordship's most obliged friend,
and faithful servant,
11 Nov. 1620. Fr. Verulam, Canc.

TO THE KING.

It may please your excellent Majesty:

In performance of your royal pleasure, signified by Sir John Suckling,* we have at several times considered of the petition of Mr. Christopher Villiers,† and have heard, as well the registers and ministers of the Prerogative Court of Canterbury, and their council, as also the council of the Lord Archbishop of Canterbury. And setting aside such other points, as are desired by the petition, we do think, that your majesty may by law, and without inconvenience, appoint an officer, that shall have the engrossing of the transcripts of all wills to be sealed with the seal of either of the prerogative courts, which shall be proved "in communi forma;" and likewise of all inventories, to be exhibited in the same courts.

We see it necessary, that all wills, which are not judicially controverted, be engrossed before the probate. Yet, as the law now stands, no officer of those courts can lawfully take any fee or reward for engrossing the said wills and inventories, the statute of the 21st of King Henry the VIIIth restraining them. Wherefore we hold it much more convenient, that it should be done by a lawful officer, to be appointed by your majesty, than in a cause not warrantable by law. Yet, our humble opinion and advice is, that good consideration be had in passing this book, as well touching a moderate proportion of fees to be allowed for the pains and travel of the officer, as for the expedition of the suitor, in such sort, that the subject may find himself in better case than he is now, and not in worse.

But, however, we conceive this may be convenient in the two courts of prerogative, where there is much business: yet, in the ordinary course of the bishops' diocesans, we hold the same will be inconvenient, in regard of the small employment.

Your majesty's most faithful
and obedient servants,
Fr. Verulam, Canc.
Robert Naunton.
Henry Montagu.‡

November 15, 1622.

* The Duke of Lenox.

* He was afterwards comptroller of the household to King Charles I., and father of the poet of the same name.

† Youngest brother to the Marquis of Buckingham. He was created, April 23, 1622, Baron of Daventry and Earl of Anglesey. He died September 24, 1624.

‡ Lord chief justice of the king's bench, who, on the 24 of December following, was advanced to the post of lord high treasurer.

TO THE KING.

IT MAY PLEASE YOUR MOST EXCELLENT MAJESTY,

According to your commandment, we have heard once more the proctors of the Prerogative Court, what they could say; and find no reason to alter, in any part, our former certificate. Thus much withal we think fit to note to your majesty, that our former certificate, which we now ratify, is principally grounded upon a point in law, upon the statute of 21 Henry VIII., wherein we, the chancellor and treasurer, for our own opinions, do conceive the law is clear; and your solicitor-general* concurs.

Now, whether your majesty will be pleased to rest in our opinions, and so to pass the patents; or give us leave to assist ourselves with the opinion of some principal judges now in town, whereby the law may be the better resolved, to avoid farther question hereafter; we leave it to your majesty's royal pleasure. This we represent the rather, because we discern such a confidence in the proctors, and those upon whom they depend, as, it is not unlike, they will bring it to a legal question.

And so we humbly kiss your majesty's hands, praying for your preservation.

Your majesty's most humble
and obedient servants,
FR. VERULAM, Canc.
HENRY MONTAGU,
ROBERT NAUNTON.

York House, December 12, 1620.

NOTES UPON MICHAEL DE LA POLE'S CASE.†

10 Rich 2. The offences were of three natures:

1. Deceits to the king.

2. Misgovernance in point of estate, whereby the ordinances made by ten commissioners for reformation of the state were frustrated, and the city of Ghent, in foreign parts, lost.

3. And his setting the seal to pardons for murders, and other enormous crimes.

The judgment was imprisonment, fine, and ransom, and restitution to the king, but no disablement, nor making him uncapable, no degrading in honour, mentioned in the judgment: but, contrariwise, in the clause, that restitution should be made and levied out of his lands and goods, it is expressly said, that because his honour of earl was not taken from him, therefore his 20*l.* *per annum* creation money, should not be meddled with.

* Sir Thomas Coventry, who was made attorney-general, January 14, 1620-1.

† This paper was probably drawn up on occasion of the proceedings and judgment passed upon the Lord Viscount St. Alban by the House of Lords, May 3, 1621.

OBSERVATIONS UPON THORPE'S CASE.

24 Edw. 3. His offence was taking of money from five several persons, that were felons, for staying their process of exigent; for that it made him a kind of accessary of felony, and touched upon matter capital.

The judgment was the judgment of felony: but the proceeding had many things strong and new; first, the proceeding was by commission of *oyer* and *terminer*, and by jury; and not by parliament.

The judgment is recited to be given in the king's high and sovereign power.

It is recited likewise, that the king, when he made him chief justice, and increased his wages, did "ore tenus" say to him, in the presence of his council, that now if he bribed he would hang him: unto which penance, for so the record called it, he submitted himself. So it was a judgment by a contract.

His oath likewise, which was devised some few years before, which is very strict in words, that he shall take no reward, neither before nor after, is chiefly insisted upon. And that, which is more to be observed, there is a precise proviso, that the judgment and proceeding shall not be drawn into example against any, and specially not against any who have not taken the like oath: which the lord chancellor, lord treasurer, master of the wards, etc., take not, but only the judges of both benches, and baron of the exchequer.

The king pardoned him presently after, doubting, as it seems, that the judgment was erroneous, both in matter and form of proceeding; brought it before the lords of parliament, who affirmed the judgment, and gave authority to the king in the like cases, for the time to come, to call to him what lords it pleased him, and to adjudge them.

NOTES UPON SIR JOHN LEE'S CASE, STEWARD OF THE KING'S HOUSEHOLD.

44 Edw. 3. His offences were, great oppressions in usurpation of authority, in attacking and imprisoning in the Tower, and other prisons, numbers of the king's subjects, for causes no ways appertaining to his jurisdiction; and for discharging an appellant of felony without warrant, and for deceit of the king, and extortions.

His judgment was only imprisonment in the Tower, until he had made a fine and ransom at the king's will; and no more.

NOTES UPON LORD LATIMER'S CASE.

50 Edw. 3. His offences were very high and heinous, drawing upon high treason: as the extortious taking of victuals in Bretagne, to a great value, without paying any thing; and for ransoming divers parishes there to the sum of 83,000*l.* contrary to the articles of truce proclaimed by the king; for suffering his deputies and lieutenants in Bretagne to exact, upon the towns and countries there, divers sums of money, to the sum of 150,000 crowns; for sharing with Richard Lyons in his deceit of the king; for enlarging, by his own authority, divers felons; and divers other exorbitant offences.

Notwithstanding all this, his judgment was only to be committed to the Marshalsea, and to make fine and ransom at the king's will.

But after, at the suit of the Commons, in regard of those horrible and treasonable offences, he was displaced from his office, and disabled to be of the king's council; but his honours not touched, and he was presently bailed by some of the lords, and suffered to go at large.

JOHN LORD NEVILLE'S CASE.

50 Edw. 3. His offences were, the not supplying the full number of the soldiers in Bretagne, according to the allowance of the king's pay. And the second was for buying certain debts, due from the king, to his own lucre, and giving the parties small recompense, and specially in a case of the Lady Ravensholme.

And it was prayed by the Commons, that he might be put out of office about the king: but there was no judgment given upon that prayer, but only of restitution to the lady, and a general clause of being punished according to his demerits.

My Lord,

If your lordship have done with that "Mascardus de Interpretatione Statutorum,"* I shall be glad, that you would give order that I might use it. And for that of 12 Hen. 7, touching the grand council in the manuscript, I have since seen a privy seal of the time of Henry 7, (without a year,) directed to borrow for the king; and in it there is a recital of a grand council, which thought, that such a sum was fit to be levied; whereof the lords gave 40,000*l.*, and the rest was to be gotten by privy seal upon loan. Doubtless, my lord, this interprets that of the manuscript story

On the back of this letter are the following notes by the Lord Viscount St. Alban.

"The case of the judgment in parliament, upon a writ of error put by Just. Hu.*

"The case of no judgment entered into the court of augmentations, or survey of first-fruits; which are dissolved, where there may be an entry after, out of a paper-book.

"*Mem.* All the acts of my proceedings were after the royal assent to the subsidy."

QUESTIONS DEMANDED OF THE CHIEF JUSTICE OF THE KING'S BENCH BY HIS MAJESTY'S COMMANDMENT.

1. In the case of the isle of Ely, whether his lordship thinks that resolution there spoken of to be law; That a general taxation upon a town, to pay so much towards the repair of the sea-banks, is not warranted to be done by the commissioners of sewers; but that the same must be upon every particular person, according to the quantity of his land, and by number of acres and perches; and according to the portion of the profit, which every one hath there.

2. In Darcy's case, whether his lordship's judgment be as he reporteth it to be resolved; that the dispensation or license of Queen Elizabeth to Darcy to have the sole importation of cards, notwithstanding the statute, 3 E. 4, is against law.

3. In Godfrey's case, what he means by this passage, Some courts cannot imprison, fine, or amerce, as ecclesiastical courts before the ordinary archdeacon, etc., or other commissioners, and such like, which proceed according to the canon or civil law.

4. In Dr. Bonham's case, what he means by this passage, That in many cases the common law shall control acts of parliament, and sometimes shall judge them to be merely void: For where an act of parliament is against common right and reason, the law shall control it, and adjudge it void.

5. In Bagges's case, to explain himself where he saith, That to the court of king's bench belongs authority, not only to correct errors in judicial proceedings, but other errors and misdemeanors extra-judicial, tending to the breach of peace, oppression of subjects, or to the raising of faction, controversies, debate, or to any manner of misgovernment. So no wrong or injury can be done,

* *Alderani Mascardi communes conclusiones utriusque juris ad generalem statutorum interpretationem accommodata:* printed at Ferrara, 1608.

* Hutton.

but, that this shall be reformed or punished by due course of law.

I received these questions the 17th of this instant October, being Thursday; and this 21st day of the same month I made these answers following:

THE HUMBLE AND DIRECT ANSWER TO THE QUESTIONS UPON THE CASE OF THE ISLE OF ELY.

The statute of the 23 Henry VIII. cap. 5, prescribeth the commission of sewers to be according to the manner, form, tenure, and effect hereafter ensuing, namely, to inquire by the oath of men, etc., who hath any lands or tenements, or common of pasture, or hath, or may have, any loss, etc.; and all these persons to tax, distrain, and punish, etc., after the quantity of lands, tenements, and rents, by the number of acres and perches, after the rate of every person's portion or profit, or after the quantity of common of pasture, or common of fishing, or other commodity there, by such ways and means, and in such manner and form, as to you, or six of you, shall seem most convenient.

The commissioners of sewers within the isle of Ely did tax Fendrayton, Samsey, and other towns generally, namely, one entire sum upon the town of Fendrayton, another upon Samsey, etc. The lords of the council wrote to myself, the chief justice of the common pleas, and unto Justice Daniel and Justice Foster, to certify our opinions, whether such a general taxation were good in law. Another question was also referred to us, whereof no question is now made: and as to this question we certified, and so I have reported as followeth, That the taxation ought to have these qualities: 1. It ought to be according to the quantity of lands, tenements, and rents, and by number of acres and perches. 2. According to the rate of every person's portion, tenure, or profit, or of the quantity of common of pasture, fishing, or other commodity, wherein we erred not, for they be the very words and text of the law, and of the commission. Therefore we concluded, that the said taxation of an entire sum in gross upon a town is not warranted by their commission, etc. And being demanded by your majesty's commandment, whether I do think the said resolution concerning the said general taxation to be law, I could have wished, that I could have heard council learned again on both sides, as I and the other judges did, when we resolved this point; and now being seven years past since the said resolution, and by all this time I never hearing any objection against it, I have considered of this case, as seriously as I could within this short time, and without conference with any; and mine humble answer is, That for any thing that I can conceive to the contrary, I remain still of my former opinion, and have, as I take it, the express text and meaning of the law to warrant mine opinion. Seeing that one town is of greater value, and subject to more danger, than another, the general taxation of a town cannot, as I take it, be just, unless the particular lands, etc., and loss be known, for the total must rise upon the particulars; and if the particulars be known, then may the taxations be in particular, as it ought, as I take it, to be according to the express words of the act and commission.

The makers of the act did thereby provide, That every man should be equally charged, according to his benefit or loss; but if the general taxations should be good, then might the entire tax set upon the town be levied of any one man or some few men of that town; which should be unequal, and against the express words of the act and commission; and if it should be in the power of their officer to levy the whole taxation upon whom he will, it would be a means of much corruption and inconvenience; all which the makers of the act did wisely foresee by the express words of the act.

If the taxation be in particular, according to the number of acres, etc., which may easily be known, it may, as I take it, be easily done.

It was not only the resolution of the said three judges, but it hath been ruled and adjudged by divers other judges in other rates accordingly.

All which, notwithstanding, I most humbly submit myself herein to your majesty's princely censure and judgment.

Edw. Coke.

THE HUMBLE AND DIRECT ANSWER TO THE QUESTION UPON D'ARCY'S CASE.

The statute of 3 of E. IV. cap. 4, at the humble petition of the card-makers, etc. within England, prohibiteth, amongst other things, the bringing into the realm of all foreign playing cards upon certain penalties. Queen Elizabeth, in the fortieth year of her reign, granted to Sir Ed. D'Arcy, his executors, deputies, and assigns, for twenty-one years, to have the sole making of playing cards within the realm, and the sole importation of foreign playing cards; and that no other should either make any such cards, within the realm, or import any foreign cards, but only the said Sir Ed. D'Arcy, his executors, deputies, and assigns, notwithstanding the said act.

The point concerning the sole making of cards within the realm is not questioned: the only question now is concerning the sole importation.

It was resolved, that the dispensation or license to have the sole importation or merchandising of cards, without any limitation or stint, is utterly against the law.

And your majesty's commandment having been signified to me, to know, whether my judgment be, as I report it to be resolved, in most humble manner I offer this answer to your majesty: That I am of opinion, that without all question the late queen by her prerogative might, as your majesty may, grant license to any man to import any quantity of the said manufacture whatsoever, with a "non obstante" of the said statute: and for proof thereof I have cited about fifteen book-cases in my report of this case. And the first of those book-cases is the 2 H. VII. fol. 6, by the which it appeareth, that if a penal statute should add a clause, That the king should grant any dispensation thereof, "non obstante" the statute; yet, the king, notwithstanding that clause of restraint, might grant dispensations at his pleasure with a "non obstante" thereof. Therefore, seeing this royal prerogative and power to grant dispensations to penal laws is so incident and inseparable to the crown, as a clause in an act of parliament cannot restrain it, I am of opinion, that when the late queen granted to Sir Ed. D'Arcy to have the sole importation of this manufacture without limitation, and that no other should import any of the same during 21 years, that the same was not of force either against the late queen, or is of force against your majesty: for, if the said grant were of force, then could not the late queen or your majesty, during the said term, grant any dispensation of this statute concerning this manufacture to any other for any cause whatsoever; which is utterly against your majesty's inseparable prerogative, and consequently utterly void; which falleth not out where the license hath a certain limitation of quantity or stint; for there the crown is not restrained to grant any other license.

And therefore where it was resolved by Popham, chief justice, and the court of king's bench, before I was a judge, That the said dispensation or license to have the sole importation and merchandising of cards without any limitation or stint, should be void, I am of the same opinion; for that it is neither against your majesty's prerogative, nor power in granting of such dispensations; but tendeth to the maintenance of your majesty's prerogative royal, and may, if it stand with your majesty's pleasure, be so explained.

Wherein in all humbleness I submit myself to your majesty's princely censure and judgment.

EDW. COKE.

THE HUMBLE AND DIRECT ANSWER TO THE QUESTION RISING UPON GODFREY'S CASE.

SOME courts cannot imprison, fine, nor amerce, as ecclesiastical courts holden before the ordinary, archdeacon, or their commissaries and such like, which proceed according to the common or civil law.

And being commanded to explain what I meant by this passage, I answer, that I intended only those ecclesiastical courts there named, and such like, that is, such like ecclesiastical courts, as peculiars, etc.

And within these words (And such like) I never did nor could intend thereby the high commission; for that is grounded upon an act of parliament, and the king's letters patents under the great seal. Therefore these words "commissaries" and "such like" cannot be extended to the high commission, but, as I have said, to inferior ecclesiastical courts.

Neither did I thereby intend the court of the admiralty; for that is not a like court to the courts before named; for those be ecclesiastical courts, and this is temporal. But I referred the reader to the case in Brooks's Abridgment, pla. 77, where it is that, if the admiral, who proceeded by the civil law, hold plea of any thing done upon the land, that it is void and "coram non judice;" and that an action of transgressions in that case doth lie, as by the said case it appeareth. And, therefore, that in that case he can neither fine nor imprison. And therewith agree divers acts of parliament; and so it may be explained, as it was truly intended.

All which I most humbly submit to your majesty's princely judgment.

EDW. COKE.

JOHN SELDEN, ESQ., TO THE LORD VISCOUNT ST. ALBAN.

MY MOST HONOURED LORD,

At your last going to Gorhambury, you were pleased to have speech with me about some passages of parliament; touching which, I conceived, by your lordship, that I should have had farther direction by a gentleman, to whom you committed some care and consideration of your lordship's intentions therein. I can only give this account of it, that never was any man more willing or ready to do your lordship service, than myself; and in that you then spake of, I had been most forward to have done whatsoever I had been, by farther direction, used in. But I understood, that your lordship's pleasure that way was changed. Since, my lord, I was advised with, touching the judgments given in the late parliament. For them, if it please your lordship to hear my weak judgment expressed freely to you, I conceive thus. First, that admitting it were no session, but only a convention, as the proclamation calls it; yet the judgments given in the Upper House, if no other reason be against them, are good; for they are given by the lords, or the Upper House, by virtue of that ordinary authority, which they have as the supreme court of judicature; which is easily to be conceived, without

any relation to the matter of session, which consists only in the passing of acts, or not passing them, with the royal assent. And, though no session of the three states together be without such acts so passed; yet, every part of the parliament severally did its own acts legally enough to continue, as the acts of other courts of justice are done. And why should any doubts be, but that a judgment out of the king's bench, or exchequer chamber, reversed there, had been good, although no session? For there was truly a parliament, truly an Upper House, which exercised by itself this power of judicature, although no session. Yet, withal, my lord, I doubt, it will fall out, upon fuller consideration, to be thought a session also. Were it not for the proclamation, I should be clearly of that mind; neither doth the clause, in the act of subsidy, hinder it. For that only prevented the determination of the session at that instant; but did not prevent the being of a session, whensoever the parliament should be dissolved. But, because that point was resolved in the proclamation, and also in the commission of dissolution on the 8th of February, I will rest satisfied.

But there are also examples of former times, that may direct us in that point of the judgment, in regard there is store of judgments of parliament, especially under Edward I. and Edward II. in such conventions, as never had, for aught appears, any act passed in them.

Next, my lord, I conceive thus; that by reason there is no record of those judgments, it may be justly thought, that they are of no force. For, thus it stands. The Lower House exhibited the declarations in paper; and the lords, receiving them, proceeded to judgment verbally; and the notes of their judgments are taken by the clerk, in the journal only; which, as I think, is no record of itself; neither was it ever used as one. Now, the record, that in former times was of the judgments and proceedings there, was in this form. The accusation was exhibited in parchment; and being so received, and endorsed, was the first record; and that remained filed among the bills of parliament, it being of itself as the bills in the king's bench. Then out of this there was a formal judgment, with the accusation entered into that roll, or second record, which the clerk transcribes by ancient use, and sends into the chancery.

But in this case there are none of these: neither doth any thing seem to help to make a record of it, than only this, that the clerk may enter it, now after the parliament; which, I doubt, he cannot. Because, although in other courts the clerks enter all, and make their records after the term; yet, in this parliamentary proceeding it falls out, that the court being dissolved, the clerk cannot be said to have such a relation to the parliament, which is not then at all in being, as the prothonotaries of the courts of Westminster have to their courts, which stand only adjourned. Besides, there cannot be an example found, by which it may appear, that ever any record of the first kind, where the transcript is into the chancery, was made in parliament; but only sitting the House, and in their view. But this I offer to your lordship's farther consideration, desiring your favourable censure of my fancy herein; which, with whatsoever ability I may pretend to, shall ever be desirous to serve you, to whom I shall perpetually own myself

Your lordship's most humble servant.

J. SELDEN.

From the Temple, February XIV, CIƆIƆCXXI.

MISCELLANEOUS.

THE FIRST COPY OF MY DISCOURSE TOUCHING THE SAFETY OF THE QUEEN'S PERSON.

These be the principal remedies, I could think of, for extirping the principal cause of those conspiracies, by the breaking the nest of those fugitive traitors, and the filling them full of terror, despair, jealousy, and revolt. And it is true, I thought of some other remedies, which, because in mine own conceit I did not so well allow, I therefore do forbear to express. And so likewise I have thought, and thought again, of the means to stop and divert as well the attempts of violence, as poison, in the performance and execution. But not knowing how my travel may be accepted, being the unwarranted wishes of a private man, I leave; humbly praying her majesty's pardon, if in the zeal of my simplicity I have roved at things above my aim.

THE FIRST FRAGMENTS OF A DISCOURSE TOUCHING INTELLIGENCE AND THE SAFETY OF THE QUEEN'S PERSON.

The first remedy, in my poor opinion, is that against which, as I conceive, least exception can be taken, as a thing without controversy, honourable and politic; and that is reputation of good intelligence. I say not only good intelligence, but the reputation and fame thereof. For I see, that where booths are set for watching thievish places, there is no more robbing: and though, no doubt, the watchmen many times are asleep or away; yet that is more than the thief knoweth; so as the empty booth is strength and safeguard enough. So, likewise, if there be sown an opinion abroad, that her majesty hath much secret intelligence, and that all is full of spies and false brethren; the fugitives will grow into such a mutual jealousy and suspicion one of another, as they will not have the confidence to conspire together, not knowing whom to trust, and thinking all practice bootless, as that which is assure to be discovered. And to this purpose, to speak reverently, as becometh me, as I do not doubt ut those honourable counsellors, to whom it doth appertain, do carefully and sufficiently provide and take order, that her majesty receive good intelligence; so yet, under correction, methinks it is not done with that glory and note of the world, which was in Mr. Secretary Walsingham's* time; and in this case, as was said, *opinio veritate major.*

The second remedy I deliver with less assurance, as that, which is more removed from the compass of mine understanding; and that is, to treat and negotiate with the King of Spain, or Archduke Ernest,† who resides in the place, where these conspiracies are most forged, upon the point of the law of nations, upon which kind of points, princes' enemies may with honour negotiate, *viz.* that, contrary to the same law of nations, and the sacred dignity of kings, and the honour of arms, certain of her majesty's subjects (if it be not thought meet to impeach any of his ministers) refuged in his dominions, have conspired and practised assassination against her majesty's person.

* Who died April 6th, 1590. After his death the business of secretary of state appears to be chiefly done by Mr. Robert Cecil, who was knighted by Queen Elizabeth at Theobald's, about the beginning of June, 1591, and in August following sworn of the privy council; but not actually appointed secretary of state till July 5, 1596.

† Ernest, Archduke of Austria, son of the Emperor Maximilian II., and governor of the Low Countries, upon which government he entered in June, 1594; but held it only a short time, dying February 11, following. It was probably in pursuance of the advice of Mr. Francis Bacon in this paper, that Queen Elizabeth sent to the archduke, in 1594, to complain of the designs which had been formed against her life by the Count de Fuentes, and Don Diego de Ibarra, and other Spanish ministers concerned in governing the Low Countries after the death of Alexander, Duke of Parma, in December, 1592, and by the English fugitives there; and to desire him to signify those facts to the King of Spain, in order that he might vindicate his own character, by punishing his ministers and delivering up to her such fugitives as were parties in such designs. *Camdeni Annales Eliz. Reginæ*, p. 625. Edit. Lugduni Bat. 1625.

THE SPEECHES*

DRAWN UP BY

MR. FRANCIS BACON FOR THE EARL OF ESSEX,

IN A DEVICE†

EXHIBITED BY HIS LORDSHIP BEFORE QUEEN ELIZABETH, ON THE ANNIVERSARY OF HER ACCESSION TO THE THRONE, NOVEMBER 17, 1595.

THE SQUIRE'S SPEECH.

Most excellent and most glorious queen, give me leave, I beseech your majesty, to offer my master's complaint and petition; complaint that, coming hither to your majesty's most happy day, he is tormented with the importunity of a melancholy, dreaming hermit, a mutinous, brain-sick soldier, and a busy, tedious secretary. His petition is, that he may be as free as the rest; and, at least, while he is here, troubled with nothing but with care how to please and honour you.

THE HERMIT'S SPEECH IN THE PRESENCE.

Though our ends be diverse, and therefore may be one more just than another; yet the complaint of this squire is general, and therefore alike unjust against us all. Albeit he is angry, that we offer ourselves to his master uncalled, and forgets we come not of ourselves, but as the messengers of self-love, from whom all that comes should be well taken. He saith, when we come, we are importunate. If he mean, that we err in form, we have that of his master, who, being a lover, useth no other form of soliciting. If he will charge us to err in matter, I, for my part, will presently prove that I persuade him to nothing but for his own good. For I wish him to leave turning over the book of fortune, which is but a play for children; when there be so many books of truth and knowledge, better worthy the revolving; and not fix his view only upon a picture in a little table, when there be so many tables of histories, yea, to life, excellent to behold and admire. Whether he believe me or no, there is no prison to the prison of the thoughts, which are free under the greatest tyrants. Shall any man make his conceit, as an anchor, mured up with the compass of one beauty or person, that may have the liberty of all contemplation? Shall he exchange the sweet travelling through the universal variety, for one wearisome and endless round or labyrinth? Let thy master, squire, offer his service to the muses. It is long since they received any into their court. They give alms continually at their gate, that many come to live upon; but few they have ever admitted into their palace. There shall he find secrets not dangerous to know; sides and parties not factious to hold; precepts and commandments

* Bishop Gibson's Papers, vol. v., No. 118.

† An account of this device, which was much applauded, is given by Mr. Rowland Whyte to Sir Robert Sydney, in a letter dated at London, Saturday, the 22d of November, 1595, and printed in the Letters and Memorials of State of the Sydney Family, vol. i., p. 362. According to this letter, the Earl of Essex, some considerable time before he came himself into the Tilt-yard, sent his page with some speech to the queen, who returned with her majesty's glove; and when his lordship came himself, he was met by an old hermit, a secretary of state, a brave soldier, and an esquire. The first presented him with a book of meditations; the second with political discourses; the third with orations of bravely fought battles; the fourth was his own follower, to whom the other three imparted much of their purpose before the earl came in. "Another," adds Mr. Whyte, "devised with him, persuading him to this and that course of life, according to their inclinations. Comes into the Tilt-yard unthought upon, the ordinary postboy of London, a ragged villain, all bemired, upon a poor lean jade, galloping and blowing for life, and delivered the secretary a packet of letters, which he presently offered my Lord of Essex. And with this dumb show our eyes were fed for that time. In the after-supper, before the queen, they first delivered a well penned speech to move this worthy knight to leave his following of love, and to betake him to heavenly meditation; the secretaries all tending to have him follow matters of state; the soldiers persuading him to the war: but the squire answered them all, and concluded with an excellent, but too plain, English, that this knight would never forsake his mistress's love, whose virtue made all his thoughts divine; whose wisdom taught him all true policy; whose beauty and worth were at all times able to make him fit to command armies. He showed all the defects and imperfections of all their times; and, therefore, thought his course of life to be best in serving his mistress." Mr. Whyte then mentions, that the part of the old hermit was performed by him, who, at Cambridge, played that of Giraldi; that Morley acted the secretary; and that the soldier was represented by him who acted the pedant, and that Mr. Tobie Matthew was the squire. "The world," says Mr. Whyte, "makes many untrue constructions of these speeches, comparing the hermit and the secretary to two of the lords; and the soldier to Sir Roger Williams. But the queen said, that 'if she had thought there had been so much said of her, she would not have been there that night;' and so went to bed."

not penal to disobey. The gardens of love, wherein he now placeth himself, are fresh to-day, and fading to-morrow, as the sun comforts them, or is turned from them. But the gardens of the muses keep the privilege of the golden age; they ever flourish, and are in league with time. The monuments of wit survive the monuments of power. The verses of a poet endure without a syllable lost, while states and empires pass many periods. Let him not think he shall descend; for he is now upon a hill, as a ship is mounted upon the ridge of a wave; but that hill of the muses is above tempests, always clear and calm; a hill of the goodliest discovery that man can have, being a prospect upon all the errors and wanderings of the present and former times. Yea, in some cliff it leadeth the eye beyond the horizon of time, and giveth no obscure divinations of times to come. So that if he will indeed lead *vitam vitalem*, a life that unites safety and dignity, pleasure and merit; if he will win admiration without envy; if he will be in the feast, and not in the throng; in the light, and not in the heat; let him embrace the life of study and contemplation. And if he will accept of no other reason, yet because the gift of the muses will enworthy him in love, and where he now looks on his mistress's outside with the eyes of sense, which are dazzled and amazed, he shall then behold her high perfections and heavenly mind with the eyes of judgment, which grow stronger by more nearly and more directly viewing such an object.

THE SOLDIER'S SPEECH.

Squire, the good old man hath said well to you; but I dare say, thou wouldst be sorry to leave to carry thy master's shield, and to carry his books: and I am sure thy master had rather be a falcon, a bird of prey, than a singing bird in a cage. The muses are to serve martial men, to sing their famous actions; and not to be served by them. Then hearken to me.

It is the war that giveth all spirits of valour, not only honour, but contentment. For mark, whether ever you did see a man grown to any honourable commandment in the wars, but, whensoever he gave it over, he was ready to die with melancholy? Such a sweet felicity is in that noble exercise, that he, that hath tasted it thoroughly, is distasted for all other. And no marvel; for if the hunter takes such solace in his chase; if the matches and wagers of sport pass away with satisfaction and delight; if the looker on be affected with pleasure in the representation of a feigned tragedy; think what contentment a man receiveth, when they, that are equal to him in nature, from the height of insolency and fury are brought to the condition of a chased prey; when a victory is obtained, whereof the victories of games are but counterfeits and shadows; and when, in a lively tragedy, a man's enemies are sacrificed before his eyes to his fortune.

Then, for the dignity of military profession, is it not the truest and perfectest practice of all virtues? of wisdom, in disposing those things, which are most subject to confusion and accident; of justice, in continual distributing rewards; of temperance, in exercising of the straightest discipline; of fortitude, in toleration of all labours and abstinence from effeminate delights; of constancy, in bearing and digesting the greatest variety of fortune. So that when all other places and professions require but their several virtues, a brave leader in the wars must be accomplished with all. It is the wars, that are the tribunal seat, where the highest rights and possessions are decided; the occupation of kings, the root of nobility, the protection of all estates. And, lastly, lovers never thought their profession sufficiently graced, till they have compared it to a warfare. All that in any other profession can be wished for, is but to live happily: but to be a brave commander in the field, death itself doth crown the head with glory. Therefore, squire, let thy master go with me: and though he be resolved in the pursuit of his love, let him aspire to it by the noblest means. For ladies count it no honour to subdue them with their fairest eyes, which will be daunted with the fierce encounter of an enemy. And they will quickly discern a champion fit to wear their glove from a page not worthy to carry their pantofle. Therefore, I say again, let him seek his fortune in the field, where he may either lose his love, or find new argument to advance it.

THE STATESMAN'S SPEECH.

Squire, my advice to thy master shall be as a token wrapped up in words; but then will it show itself fair, when it is unfolded in his actions. To wish him to change from one humour to another, were but as if, for the cure of a man in pain, one should advise him to lie upon the other side, but not enable him to stand on his feet. If from a sanguine, delightful humour of love, he turn to a melancholy, retired humour of contemplation, or a turbulent, boiling humour of the wars; what doth he but change tyrants? Contemplation is a dream; love a trance; and the humour of a war is raving. These be shifts of humour, but no reclaiming to reason. I debar him not studies nor books, to give him stay and variety of conceit, to refresh his mind, to cover sloth and indisposition, and to draw to him from those that are studious, respect and commendation. But let him beware, lest they possess not too much of his time; that they abstract not his judgment from present experience, nor make him presume upon knowing

much, to apply the less. For the wars, I deny him no enterprise, that shall be worthy in greatness, likely in success, or necessary in duty; not mixed with any circumstance of jealousy, but duly laid upon him. But I would not have him take the alarm from his own humour, but from the occasion; and I would again he should know an employment from a discourting. And for his love, let it not disarm his heart within, as it make him too credulous to favours, nor too tender to unkindnesses, nor too apt to depend upon the heart he knows not. Nay, in his demonstration of love, let him not go too far; for these seely lovers, when they profess such infinite affection and obligation, they tax themselves at so high a rate, that they are ever under arrest. It makes their service seem nothing, and every cavil or imputation very great. But what, Squire, is thy master's end? If to make the prince happy he serves, let the instructions to employ men, the relations of ambassadors, the treaties between princes, and actions of the present time, be the books he reads; let the orations of wise princes, or experimented counsellors in council or Parliament, and the final sentences of grave and learned judges in weighty and doubtful causes, be the lecturers he frequents. Let the holding of affection with confederates without charge, the frustrating of the attempts of enemies without battles, the entitling of the crown to new possessions without show of wrong, the filling of the prince's coffers without violence, the keeping of men in appetite without impatience, be the inventions he seeks out. Let policy and matters of state be the chief, and almost the only thing, he intends. But if he will believe Philautia, and seek most his own happiness, he must not of them embrace all kinds, but make choice, and avoid all matter of peril, displeasure, and charge, and turn them over to some novices, that know not manacles from bracelets, nor burdens from robes. For himself, let him set for matters of commodity and strength, though they be joined with envy. Let him not trouble himself too laboriously to sound into any matter deeply, or to execute any thing exactly; but let himself make himself cunning rather in the humours and drifts of persons, than in the nature of business and affairs. Of that it sufficeth to know only so much, as may make him able to make use of other men's wits, and to make again a smooth and pleasing report. Let him entertain the proposition of others, and ever rather let him have an eye to the circumstances, than to the matter itself; for then shall he ever seem to add somewhat of his own; and, besides, when a man doth not forget so much as a circumstance, men do think his wit doth superabound for the substance. In his councils let him not be confident; for that will rather make him obnoxious to the success; but let him follow the wisdom of oracles, which uttered that which might ever be applied to the event. And ever rather let him take the side which is likeliest to be followed, than that which is soundest and best, that every thing may seem to be carried by his direction. To conclude, let him be true to himself, and avoid all tedious reaches of state, that are not merely pertinent to his particular. And if he will needs pursue his affection, and go on his course, what can so much advance him in his own way? The merit of war is too outwardly glorious to be inwardly grateful; and it is the exile of his eyes, which, looking with such affection upon the picture, cannot but with infinite contentment behold the life. But when his mistress shall perceive, that his endeavours are become a true support of her, a discharge of her care a watchman of her person, a scholar of her wisdom, an instrument of her operation, and a conduit of her virtue; this, with his diligences, accesses, humility, and patience, may move him to give her further degrees and approaches to her favour. So that I conclude, I have traced him the way to that, which hath been granted to some few *amare et sapere*, to love and be wise.

THE REPLY OF THE SQUIRE.

Wandering hermit, storming soldier, and hollow statesman, the enchanting orators of Philautia, which have attempted by your high charms to turn resolved Erophilus into a statue deprived of action, or into a vulture attending about dead bodies, or into a monster with a double heart; with infinite assurance, but with just indignation, and forced patience, I have suffered you to bring in play your whole forces. For I would not vouchsafe to combat you one by one, as if I trusted to the goodness of my breath, and not the goodness of my strength, which little needeth the advantage of your severing, and much less of your disagreeing. Therefore, first, I would know of you all what assurance you have of the fruit whereto you aspire.

You, father, that pretend to truth and knowledge, how are you assured that you adore not vain chimeras and imaginations? that in your high prospect, when you think men wander up and down, that they stand not indeed still in their place, and it is some smoke or cloud between you and them, which moveth, or else the dazzling of your own eyes? Have not many, which take themselves to be inward counsellors with nature, proved but idle believers, which told us tales, which were no such matter? And, soldier, what security have you for these victories and garlands which you promise to yourself? Know you not of many, which have made provision of laurel for the victory, and have been fain to exchange it with cypress for the funeral? of many which have bespoken fame to sound their triumphs, and have been

glad to pray her to say nothing of them, and not to discover them in their flights?

Corrupt statesman, you that think, by your engines and motions, to govern the wheel of fortune; do you not mark, that clocks cannot be long in temper? that jugglers are no longer in request when there tricks and sleights are once perceived? Nay, do you not see, that never any man made his own cunning and practice (without religion and moral honesty) his foundation, but he overbuilt himself, and in the end made his house a windfall? But give ear now to the comparison of my master's condition, and acknowledge such a difference, as is betwixt the melting hailstone and the solid pearl. Indeed it seemeth to depend, as the globe of the earth seemeth to hang in the air; but yet it is firm and stable in itself. It is like a cube, or a die-form, which, toss it or throw it any way, it ever lighteth upon a square. Is he denied the hopes of favours to come? He can resort to the remembrance of contentments past. Destiny cannot repeal that which is past. Doth he find the acknowledgment of his affection small? He may find the merit of his affection the greater. Fortune cannot have power over that which is within. Nay, his falls are like the falls of Antæus; they renew his strength. His clouds are like the clouds of harvest, which make the sun break forth with greater force. His wanes are changes like the moon's, whose globe is all light towards the sun, when it is all dark towards the world; such is the excellency of her nature, and of his estate. Attend, you beadsman of the muses, you take your pleasure in a wilderness of variety; but it is but of shadows. You are as a man rich in pictures, medals, and crystals. Your mind is of the water, which taketh all forms and impressions, but is weak of substance. Will you compare shadows with bodies, picture with life, variety of many beauties with the peerless excellency of one? the element of water with the element of fire? And such is the comparison between knowledge and love.

Come out, man of war; you must be ever in noise. You will give laws, and advance force, and trouble nations, and remove landmarks of kingdoms, and hunt men, and pen tragedies in blood; and, that which is worst of all, make all the virtues accessary to bloodshed. Hath the practice of force so deprived you of the use of reason, as that you will compare the interruption of society with the perfection of society? the conquest of bodies with the conquest of spirits? the terrestrial fire, which destroyeth and dissolveth, with the celestial fire, which quickeneth and giveth life? And such is the comparison between the soldier and the lover.

And as for you, untrue politique, but truest bondman to Philautia, you, that presume to bind occasion, and to overwork fortune, I would ask you but one question. Did ever any lady, hard to please, or disposed to exercise her lover, enjoin him so good tasks and commandments as Philautia exacteth of you? While your life is nothing but a continual acting upon a stage; and that your mind must serve your humour, and yet your outward person must serve your end; so as you carry in one person two several servitudes to contrary masters. But I will leave you to the scorn of that mistress whom you undertake to govern; that is, to fortune, to whom Philautia hath bound you. And yet, you commissioner of Philautia, I will proceed one degree farther: if I allowed both of your assurance, and of your values, as you have set them, may not my master enjoy his own felicity; and have all yours for advantage? I do not mean, that he should divide himself in both pursuits, as in your feigning tales towards the conclusion you did yield him; but because all these are in the hands of his mistress more fully to bestow, than they can be attained by your addresses, knowledge, fame, fortune. For the muses, they are tributary to her majesty for the great liberties they have enjoyed in her kingdom, during her most flourishing reign; in thankfulness whereof, they have adorned and accomplished her majesty with the gifts of all the sisters. What library can present such a story of great actions, as her majesty carrieth in her royal breast by the often return of this happy day? What worthy author, or favourite of the muses, is not familiar with her? Or what language, wherein the muses have used to speak, is unknown to her? Therefore the hearing of her, the observing of her, the receiving instructions from her, may be to Erophilus a lecture exceeding all dead monuments of the muses. For fame, can all the exploits of the war win him such a title, as to have the name of favoured and selected servant of such a queen? For fortune, can any insolent politique promise to himself such a fortune, by making his own way, as the excellency of her nature cannot deny to a careful, obsequious, and dutiful servant? And if he could, were it equal honour to obtain it by a shop of cunning, as by the gift of such a hand?

Therefore Erophilus's resolution is fixed: he renounceth Philautia, and all her enchantments. For her recreation, he will confer with his muse; for her defence and honour he will sacrifice his life in the wars, hoping to be embalmed in the sweet odours of her remembrance. To her service will he consecrate all his watchful endeavours, and will ever bear in his heart the picture of her beauty; in his actions, of her will; and in his fortune, of her grace and favour.

REMEMBRANCES FOR THE KING,

BEFORE HIS GOING INTO SCOTLAND.

MAY IT PLEASE YOUR MAJESTY,

ALTHOUGH your journey be but as a long progress, and that your majesty shall be still within your own land, and therefore any extraordinary course neither needful, nor, in my opinion, fit; yet, nevertheless, I thought it agreeable to my duty and care of your service to put you in mind of those points of form, which have relation, not so much to a journey into Scotland, as to an absence from your city of London for six months, or to a distance from your said city near three hundred miles, and that in an ordinary course; wherein I lead myself by calling to consideration what things there are that require your signature, and may seem not so fit to expect sending to and fro; and therefore to be supplied by some precedent warrants.

First, your ordinary commissions of justice, of assizes, and the peace, need not your signature, but pass of course by your chancellor. And your commissions of lieutenancy, though they need your signature, yet, if any of the lieutenants should die, your majesty's choice and pleasure may be very well attended. Only I should think fit, under your majesty's correction, that such of your lord lieutenants as do not attend your person were commanded to abide within their countries respectively.

For grants, if there were a longer cessation, I think your majesty will easily believe it will do no hurt. And yet if any be necessary, the continual despatches will supply that turn.

That which is chiefly considerable is proclamations, which all do require your majesty's signature, except you leave some warrant under your great seal to your standing council here in London.

It is true I cannot foresee any such case of such sudden necessity, except it should be the apprehension of some great offenders, or the adjournment of the term upon sickness, or some riot in the city, such as hath been about the liberties of the Tower, or against strangers, &c. But your majesty, in your great wisdom, may perhaps think of many things that I cannot remember or foresee: and therefore it was fit to refer those things to your better judgment.

Also my lord chancellor's age and health is such as it doth not only admit, but require the accident of his death* to be thought of, which may fall in such a time as the very commissions of ordinary justice beforementioned, and writs, which require present despatch, cannot well be put off. Therefore your majesty may be pleased to take into consideration, whether you will not have such a commission as was prepared about this time twelvemonth in my lord's extreme sickness, for the taking of the seal into custody, and for the seal of writs and commissions for ordinary justice, till you may advise of a chancellor or keeper of the great seal.

Your majesty will graciously pardon my care, which is assiduous; and it is good to err in caring even rather too much than too little. These things, for so much as concerneth forms, ought to proceed from my place, as attorney, unto which you have added some interest in matter, by making me of your privy council. But for the main they rest wholly in your princely judgment, being well informed; because miracles are ceased, though admiration will not cease while you live.

Endorsed,
February 21, 1616.

ACCOUNT OF COUNCIL BUSINESS.

FOR remedy against the infestation of pirates, than which there is not a better work under heaven, and therefore worthy of the great care his majesty hath expressed concerning the same, this is done:

First, Sir Thomas Smith* hath certified in writing, on the behalf of the merchants of London, that there will be a contribution of twenty thousand pounds a year, during two years' space, towards the charge of repressing the pirates;

* Of Biborough in Kent, second son of Thomas Smith, of Ostenhanger, of that county, Esq. He had farmed the customs in the reign of Queen Elizabeth, and was sent by King James I. ambassador to the court of Russia, in March, 1604; from whence returning, he was made governor of the society of merchants trading to the East Indies, Muscovy, the French and Summer Islands; and treasurer for the colony and company of Virginia. He built a magnificent house at Deptford, which was burnt on the 30th of January, 1618; and in April, 1619, he was removed from his employments of governor and treasurer, upon several complaints of frauds committed by him.

* He died at the age of seventy, on the 15th of March, 1616-7, having resigned the great seal on the third of that month; which was given on the 7th to Sir Francis Bacon

wherein we do both conceive that this, being as the first offer, will be increased. And we consider, also, that the merchants of the west, who have sustained in proportion far greater damage than those of London, will come into the circle, and follow the example; and for that purpose letters are directed unto them.

Secondly, for the consultation *de modo* of the arming and proceeding against them, in respect that my lord admiral* cometh not yet abroad, the table hath referred it to my lord treasurer,† the Lord Carew,‡ and Mr. Chancellor of the Exchequer,§ who heretofore hath served as treasurer of the navy, to confer with the lord admiral, calling to that conference Sir Robert Mansell, and others expert in sea service, and so to make report unto the board. At which time some principal merchants shall likewise attend for the lords' better information.

So that, when this is done, his majesty shall be advertised from the table; whereupon his majesty may be pleased to take into his royal consideration, both the business in itself, and as it may have relation to Sir John Digby's embassage.

For safety and caution against tumults and disorders in and near the city, in respect of some idle flying papers, that were cast abroad of a May-day, &c. the lords have wisely taken a course neither to nurse it or nourish it by too much apprehension, nor much less to neglect due provision to make all sure. And therefore order is given, that as well the trained bands as the military bands newly erected shall be in muster as well weekly, in the mean time, on every Thursday, which is the day upon which May-day falleth, as in the May-week itself, the Monday, Tuesday, Wednesday, and Thursday. Besides that, the strength of the watch shall that day be increased.

For the buildings in and about London, order is given for four selected aldermen and four selected justices to have the care and charge thereof laid upon them; and they answerable for the observing of his majesty's proclamation, and for stop of all farther building; for which purposes the said Eslus are warned to be before the board, where they shall receive a strait charge, and be tied to a continual account.

For the provost's marshals there is already direction given for the city and the counties adjacent; and it shall be strengthened with farther commission, if there be cause.

For the proclamation that lieutenants, (not being counsellors,) deputy lieutenants, justices of the peace, and gentlemen of quality should depart the city, and reside in their countries, we find the city so dead of company of that kind for the present, as we account it out season to command that which is already done. But after men have attended their business the two next terms, in the end of Trinity term, according to the custom, when the justices shall attend at the Star Chamber, I shall give a charge concerning the same; and that shall be corroborated by a proclamation, if cause be.

For the information given against the Witherington, that they should countenance and abet the spoils and disorders in the middle shires, we find the informers to falter and fail in their accusation. Nevertheless, upon my motion, the table hath ordered, that the informer shall attend one of the clerks of the council, and set down articulately what he can speak, and how he can prove it, and against whom, either the Witheringtons or others.

For the causes of Ireland, and the late letters from the deputy,* we have but entered into them, and have appointed Tuesday for a farther consultation of the same; and, therefore, of that subject I forbear to write more for this present.

Endorsed,
March 30, 1617. *An account of Council Business.*

AN ACCOUNT OF COUNCIL BUSINESS,

AND OF OTHER MATTERS COMMITTED TO ME BY HIS MAJESTY.

First, for May-day, at which time there was great apprehension of tumult by apprentices and loose people. There was never such a still. The remedies that did the effect were three.

First, the putting in muster of the trained bands and military bands in a brave fashion that way. Next, the laying a strait charge upon the mayor and aldermen for the city, and justices of the peace for the suburbs, that the apprentices and others might go abroad with their flags and other gauderies, but without weapon of shot and pike, as they formerly took liberty to do; which charge

* Charles Howard, Earl of Nottingham.
† Thomas Howard, Earl of Suffolk.
‡ George, Lord Carew, who had been president of Munster, in Ireland, and was now master of the ordnance. He was created Earl of Totness by King Charles I., in 1626.
§ Sir Fulk Greville.

* Sir Oliver St. John, afterwards Viscount Grandison.

was exceedingly well performed and obeyed. And the last was, that we had, according to our warrant dormant, strengthened our commissions of the peace in London and Middlesex with new clauses of lieutenantcy; which, as soon as it was known abroad, all was quiet by the terror it wrought. This I write because it maketh good my further assurance I gave his majesty at his first removes, that all should be quiet, for which I received his thanks.

For the Irish affairs, I received this day his majesty's letters to the lords, which we have not yet opened, but shall sit upon them this afternoon. I do not forget, besides the points of state, to put my lord treasurer in remembrance that his majesty laid upon him the care of the improvement of the revenue of Ireland by all good means, of which I find his lordship very careful, and I will help him the best I can.

The matter of the revenue of the recusants here in England I purpose to put forward by a conference with my Lord of Canterbury, upon whom the king laid it, and upon Secretary Winwood; and because it is a matter of the exchequer, with my lord treasurer and Mr. Chancellor, and after to take the assistance of Mr. Attorney and the learned counsel, and when we have put it in a frame, to certify his majesty.

The business of the pirates is, I doubt not, by this time come to his majesty upon the letters of us the commissioners, whereof I took special care. And I must say I find Mr. Vice-Chamberlain a good able man with his pen. But to speak of the main business, which is the match with Spain, the king knows my mind by a former letter; that I would be glad it proceeded with a united counsel; not but that votes and thoughts are to be free. But yet, after a king hath resolved, all men ought to co-operate, and neither to be active nor much *loquutive* in *oppositum*; especially in a case where a few dissenting from the rest may hurt the business in *foro famæ*.

Yesterday, which was my weary day, I bid all the judges to dinner, (which was not used to be,) and entertained them in a private withdrawing chamber, with the learned counsel. When the feast was passed, I came amongst them, and set me down at the end of the table, and prayed them to think I was one of them, and but a foreman. I told them I was weary, and therefore must be short, and that I would now speak to them upon two points. Whereof the one was, that I would tell them plainly, that I was firmly persuaded, that the former discords and differences between the chancery and other courts were but flesh and blood; and that now the men were gone, the matter was gone; and that, for my part, as I would not suffer any the least diminution or derogation from the ancient and due power of the chancery, so, if any thing should be brought to them at any time, touching the proceedings of the chancery, which did seem to them exorbitant, or inordinate; that they should freely and friendly acquaint me with it, and we should soon agree; or if not, we had a master that could easily both discern and rule. At which speech of mine, besides a great deal of thanks and acknowledgment, I did see cheer and comfort in their faces, as if it were a new world.

The second point was, that I let them know how his majesty at his going gave me charge to call and receive from them the accounts of their circuits, according to his majesty's former prescript, to be set down in writing. And that I was to transmit the writings themselves to his majesty, and, accordingly, as soon as I have received them, I will send them to his majesty.

Some two days before I had a conference with some judges, (not all, but such as I did choose,) touching the high commission, and the extending of the same in some points, which I see I shall be able to despatch by consent, without his majesty's further trouble.

I did call upon the committees also for the proceeding in the purging of Sir Edward Coke's Reports, which I see they go on with seriously.*

Thanks be to God, we have not much to do for matters of counsel; and I see now that his majesty is as well able by his letters to govern England from Scotland, as he was to govern Scotland from England.

* During the time that my Lord Chief Justice Coke lay under the displeasure of the court, for the reasons I have mentioned in the Discourse preceding these letters, some information was given to the king, that he, having published eleven books of Reports, had written many things against his majesty's prerogative. And, being commanded to explain some of them, my Lord Chancellor Ellesmere doth, thereupon, in his letter of 22d of October, 1616, write thus to the king: According to your majesty's directions signified unto me by Mr. Solicitor, I called the lord chief justice before me on Thursday, the 17th instant, in the presence of Mr. Attorney and others of your learned counsel. I did let him know your majesty's acceptance of the few animadversions which, upon review of his own labours, he had sent, though fewer than you expected, and his excuses other than you expected. And did at the same time inform him, that his majesty was dissatisfied with several other passages therein; and those not the principal points of the cases judged, but delivered by way of expatiation, and which might have been omitted without prejudice to the judgment: of which sort the attorney and solicitor-general did for the present only select five, which being delivered to the chief justice on the 17th of October, he returns his answers at large upon the 21st of the same month, the which I have seen under his own hand. It is true, the lord chancellor wished he might have been spared all service concerning the chief justice, as remembering the fifth petition of *dimitte nobis debita nostra*, &c. Insomuch that, though a committee of judges was appointed to consider these books, yet the matter seems to have slept, till after Sir Francis Bacon was made lord keeper, it revived, and two judges more were added to the former. Whereupon, Sir Edward Coke doth, by his letter, make his humble suit to the Earl of Buckingham,—1. That if his majesty shall not be satisfied with his former offer, viz. by the advice of the judges to explain and publish those points, so as no shadow may remain against his prerogative; that then all the judges of England may be called thereto. 2. That they might certify also what cases he had published for his majesty's prerogative and benefit, for the good of the church, and quieting men's inheritances, and good of the commonwealth. But Sir Edward being then or soon

A DRAUGHT OF AN ACT

AGAINST

A USURIOUS SHIFT OF GAIN, IN DELIVERING COMMODITIES INSTEAD OF MONEY.

Whereas it is a usual practice, to the undoing and overthrowing many young gentlemen, and others, that when men are in necessity, and desire to borrow money, they are answered, that money cannot be had, but that they may have commodities sold unto them upon credit, whereof they may make money as they can: in which course it ever comes to pass, not only that such commodities are bought at extreme high rates, and sold again far under foot to a double loss; but also that the party which is to borrow is wrapt in bonds and counter-bonds; so that upon a little money which he receiveth, he is subject to penalties and suits of great value.

Be it therefore enacted, by the authority of this present Parliament, that if any man, after forty days from the end of this present session of Parliament to be accounted, shall sell in gross sale any quantity of wares or commodities unto such a one as is no retailer, chapman, or known broker of the same commodities, and knowing that it is bought to be sold again, to help and furnish any person, that tradeth not in the same commodity, with money, he shall be without all remedy by law, or custom, or decree, or otherwise, to recover or demand any satisfaction for the said wares or commodities, what assurance soever he shall have by bond, surety, pawn, or promise of the party, or any other in his behalf. And that all bonds and assurances whatsoever, made for that purpose directly or indirectly, shall be utterly void.

And be it further enacted, by the authority aforesaid, that every person, which shall after the time aforesaid be used or employed as a broker, mean, or procurer, for the taking up of such commodities, shall forfeit for every such offence the sum of one hundred pounds, the same to be and shall be farther punished by six months' imprisonment, without bail or mainprise, and by the pillory.

A PROPOSITION

FOR THE

REPRESSING OF SINGULAR COMBATS OR DUELS,

IN THE HANDWRITING OF SIR FRANCIS BACON.

First, for the ordinance which his majesty may establish herein, I wish it may not look back to any offence past, for that strikes before it warns. I wish also it may be declared to be temporary, until a Parliament; for that will be very acceptable to the Parliament; and it is good to teach a Parliament to work upon an edict or proclamation precedent.

For the manner, I should think fit there be published a grave and severe proclamation, induced by the overflow of the present mischief.

For the ordinance itself: first, I consider that offence hath vogue only amongst noble persons, or persons of quality. I consider also that the greatest honour for subjects of quality in a lawful monarchy, is to have access and approach

after, coming into favour by the marriage of his daughter, I conceive there was no farther proceedings in this affair. It will be needless for me to declare what reputation these books have among the professors of the law; but I cannot omit, upon this occasion, to take notice of a character Sir Francis Bacon had some time before given them, in his proposition to the king touching the compiling and amendment of the laws of England. "To give every man his due, had it not been for Sir Edward Coke's Reports, which, though they may have errors, and some peremptory and extrajudicial resolutions more than are warranted, yet they contain infinite good decisions and rulings over of cases, the law by this time had been almost like a ship without ballast; for, that the cases of modern experience are fled from those that are adjudged and ruled in former time."

to their sovereign's sight and person, which is the fountain of honour: and though this be a comfort all persons of quality do not use; yet there is no good spirit but will think himself in darkness, if he be debarred of it. Therefore I do propound, that the principal part of the punishment be, that the offender, in the cases hereafter set down, be banished perpetually from approach to the courts of the king, queen, or prince.

Secondly, That the same offender receive a strict prosecution by the king's attorney, *ore tenus*, in the Star Chamber; for the fact being notorious, will always be confessed, and so made fit for an *ore tenus*. And that this prosecution be without respect of person, be the offender never so great; and that the fine set be irremissible.

Lastly, For the causes, that they be these following:

1. Where any singular combat, upon what quarrel soever, is acted and performed, though death do not ensue.
2. Where any person passeth beyond the seas, with purpose to perform any singular combat, though it be never acted.
3. Where any person sendeth a challenge.
4. Where any person accepteth a challenge.
5. Where any person carrieth or delivereth a challenge.
6. Where any person appointeth the field, directly, or indirectly, although it be not upon any cartel or challenge in writing.
7. Where any person accept to be a second in any quarrel.

ADVICE TO THE KING.

FOR REVIVING THE COMMISSION OF SUITS.

That which for the present I would have spoken with his majesty about, was a matter wherein time may be precious, being upon the tenderest point of all others. For though the particular occasion may be despised, (and yet nothing ought to be despised in this kind,) yet the counsel thereupon I conceive to be most sound and necessary, to avoid future perils.

There is an examination taken within these few days by Mr. Attorney, concerning one Bayntan, or Baynham, (for his name is not yet certain,) attested by two witnesses, that the said Bayntan, without any apparent show of being overcome with drink, otherwise than so as might make him less wary to keep secrets, said that he had been lately with the king, to petition him for reward of service; which was denied him. Whereupon it was twice in his mind to have killed his majesty. The man is not yet apprehended, and said by some to be mad, or half mad; which in my opinion, is not the less dangerous; for such men commonly do most mischief; and the manner of his speaking imported no distraction. But the counsel I would out of my care ground hereupon, is, that his majesty would revive the commission for suits, which hath been now for these three years or more laid down. For it may prevent any the like wicked cogitations, which the devil may put into the mind of a roarer or swaggerer upon a denial: and, besides, it will free his majesty from much importunity, and save his coffers also. For I am sure when I was a commissioner, in three whole years' space there passed scarce ten suits that were allowed. And I doubt now, upon his majesty's coming home from this journey, he will be much troubled with petitions and suits, which maketh me think this remedy more seasonable. It is not meant, that suits generally should pass that way, but only such suits as his majesty would be rid on.

Endorsed,

September 21, 1617,—*To revive the commission of suits. For the King.*

REASONS

WHY THE NEW COMPANY IS NOT TO BE TRUSTED AND CONTINUED WITH THE TRADE OF CLOTHES.

First, The company consists of a number of young men shopkeepers, which not being bred in the trade, are fearful to meddle with any of the dear and fine clothes, but only meddle with the coarse clothes, which is every man's skill; and, besides, having other trades to live upon, they come in the

sunshine so long as things go well, and as soon as they meet with any storm or cloud, they leave trade, and go back to shopkeeping. Whereas the old company were beaten traders, and having no other means of living but that trade, were fain to ride out all accidents and difficulties, which (being men of great ability) they were well able to do.

Secondly, These young men being the major part, and having a kind of dependence upon Alderman Cockaine, they carry things by plurality of voices. And yet those few of the old company which are amongst them do drive almost three parts of the trade; and it is impossible things should go well, where one part gives the vote, and the other doth the work; so that the execution of all things lies chiefly upon them that never consented, which is merely *motus violentus*, and cannot last.

Thirdly, The new company make continually such new springing demands, as the state can never be secure nor trust to them, neither doth it seem that they do much trust themselves.

Fourthly, The present stand of cloth at Blackwell-hall (which is that that presseth the state most, and is provided for but a temporary and weak remedy) is supposed would be presently at an end, upon the revivor of the old; in respect that they are able men and united amongst themselves.

Fifthly, In these cases, *opinio est veritate major*, and the very voice and expectation of revivor of the old company will comfort the clothiers, and encourage them not to lay down their looms.

Sixthly, The very Flemings themselves (in regard of the pique they have against the new company) are like to be more pliant and tractable towards his majesty's ends and desires.

Seventhly, Considering the business hath not gone on well; his majesty must either lay the fault upon the matter itself, or upon the persons that have managed it; wherein the king shall best acquit his honour, to lay it where it is indeed; that is, upon the carriage and proceedings of the new company, which have been full of uncertainty and abuse.

Lastly, The subjects of this kingdom generally have an ill taste and conceit of the new company; and therefore the putting of them down will discharge the state of a great deal of envy.

MISCELLANEOUS TRACTS.

[TRANSLATED FROM THE LATIN.]

OF THE INTERPRETATION OF NATURE

XII. SENTENCES.

Of the Condition of Man.

1. Man, the servant and interpreter of nature, does and understands as much, as he shall really or mentally observe of the order of nature, himself meanwhile enclosed around by the laws of nature.

2. The limit, therefore, of human power and knowledge, is in the faculties, with which man is endowed by nature for moving and perceiving, as well as in the state of present things. For beyond these bases, those instruments avail not.

3. These faculties, though of themselves weak and inept, are yet capable, when properly and regularly managed, of setting before the judgment and use things most remote from sense and action, and of overcoming greater difficulty of works and obscurity of knowledge, than any one hath yet learned to wish.

4. Truth is one, interpretation one; but sense is oblique, the mind alien, the matter urgent; yet the work itself of interpretation is devious rather than difficult.

Of the Impediments of Interpretation.

5. Whoever, unable to doubt, and eager to affirm, shall establish principles proved, (as he believes,) conceded, and manifest, and, according to the unmoved truth of these, shall reject or receive others as repugnant or favourable; he shall exchange things for words, reason for insanity, the world for a fable, and shall be incapable of interpreting.

6. He who hath not mixed, confounded, and reduced into a mass, all distinction of things, which appears in the commonly established species, and the names imposed, shall not see the unity of nature, nor the legitimate lines of things, and shall not be able to interpret.

7. He who hath not first, and before all, intimately explored the movements of the human mind, and therein most accurately distinguished the course of knowledge and the seats of error, shall find all things masked and, as it were, enchanted, and, till he undo the charm, shall be unable to interpret.

8. He who is occupied in inquiring into the causes of things obvious and compound, as flame, dreams, fever, and doth not betake himself to simple natures; first, to those which are popularly esteemed such; next, to those which by art are reduced and, as it were, sublimed to truer simplicity, he shall, perhaps, if in the rest he err not, add to inventions some things not to be contemned, and next to inventions. But he shall effect nothing against the greater secularities of things, nor shall he be named an interpreter.

Of the Qualities of the Interpreter.

9. Let him who comes to interpret thus prepare and qualify himself; let him not be a follower of novelty, nor of custom or antiquity; neither let him embrace the license of contradicting or the servitude of authority. Let him not be hasty to affirm or unrestrained in doubting, but let him produce every thing marked with a certain degree of probation. Let hope be the cause of labour to him, not of idleness. Let him estimate things not by their rareness, difficulty, or credit, but by their real importance. Let him manage his private affairs under a mask, yet with some regard for the provisions of things. Let him prudently observe the first entrances of errors into truths, and of truths into errors, nothing contemning or admiring. Let him know the advantages of his nature; and let him humour the nature of others, for no man is angry with the stone that is

striking him. Let him, as it were, with one eye scan the natures of things; with the other, the uses of mankind. Of words let him distinctly know the mixed nature, which especially partakes of advantage and of inconvenience. Let him determine that with inventions the art of inventing grows. Also, let him not be vain in concealing or in setting forth the knowledge which he hath obtained, but ingenuous and prudent, and let him commend his inventions, not ambitiously or spitefully, but first in a manner most vivid and fresh, that is, most fortified against the injuries of time, and most powerful for the propagation of science, then least capable of begetting errors, and, above all, such as may procure him a legitimate reader.

Of the Duty of the Interpreter.

10. Thus qualified and prepared, let the interpreter, proceed in this way. He will consider the condition of man, and remove the impediments of interpretation; then, girded up for his work, he will prepare a history and regular series of tables, at the same time appointing their uses, co-ordinations, occurrences, and appendages. He will exhibit the solitude of things and their resemblance of each other. He will also make a selection of things, and those which are most primitive or instant, that is, conduce especially to the invention of other things, or to human wants, he will place first in order. He will also observe the pre-eminences of instances, which can do much to shorten his work. And thus furnished, he will at length maturely and happily undertake and complete rearrangements and new tables, and the interpretation itself now easy and following spontaneously, nay, almost as if snatched away from the mind. Which, when he shall have accomplished, he will immediately perceive and number, in their pure and native light, the true, eternal, and simplest motions of nature, from the ordinate and well adjusted progress of which arises all this infinite variety, both of the present and of all ages. And meanwhile from the beginning of his work he will not fail to receive constantly, as interest, for human affairs many things and unknown. But from hence again, altogether directing himself to and intent upon the uses of mankind, and the present state of things, he will, in diverse ways, dispose and arrange the whole for action. To natures the most secret he will assign others explanatory, and to the most absent others superinductory. And then at last, like a second nature, he will institute generalities, the errors of which may be accounted monsters, yet also saving to himself the prerogative of his art.

Of the Provision of Things.

11. But thou receivest these things with languid hope and zeal, my son, and wonderest, if there remains such store of works most fruitful and altogether unknown, that they have not before this time, or now suddenly, been discovered; at the same time thou inquirest what they are by name, and promisest to thyself immortality, or freedom from pain, or transporting pleasure. But thou bestowest liberally upon thyself, my son, and wilt hunt after hope from knowledge, as from ignorance thou didst begin to hunt despair. Is it also by art, that the work must be adopted. Yet, as far as may be, I shall satisfy thy doubt, and obey thee. That these things are suddenly known, my son, is no wonder. Knowledge is of quick, time of tardy birth. Also the noble things which were invented before these, were not by the light of former knowledge gradually invented, but by chance, (as they say,) abundantly. But in things mechanical there is a certain extension of what is already invented, which yet deserves not the name of new invention. The way is not long, my son, but ambiguous. Yet, when I say that these things have not come to view before this time, hast thou ascertained, how much was known to all antiquity, or in all countries, or even to single individuals. But I almost agree with thee, my son, and will lead thee higher by the hand. Thou doubtest not but that if men had never existed, many of the things which are made by art (as they say) would have been wanting, as marble statues, clothes. But now, and men, have not they too their motions which they obey? Truly, my son, more subtle, and more difficult to comprehend by knowledge, yet equally certain. Indeed, you will say, men obey their will. I hear, but this is nothing. Such a cause as fortune is in the universe, such is the will in man. If any thing therefore is produced, yet not without man, and lies also beyond the ways of man, is it not equal to nothing? Man lights upon certain inventions which, as it were, present themselves, others he attains to by foreseeing the end and knowing the means. The knowledge of the means however he derives from things obvious. In which number then shall be placed those inventions which from things obvious receive neither obvious effect nor method and light of operations? Such works are called Epistemides, or daughters of science, which do not otherwise come into action than by knowledge and pure interpretation, seeing they contain nothing obvious. But between these and the obvious now many degrees thinkest thou are numbered? Receive, my son, and seal.

12. In the last place, my son, I counsel thee, as is especially necessary, with an enlightened and sober mind to distinguish the interpretation of things divine and things natural, and not to suffer these in any way to be mingled together. Errors enough there are in this kind. Nothing is learned here unless by the similitudes of things to each other: which, though they seem most dis-

similar, do yet contain a genuine similitude known to the interpreter. But God is as similar to thee, and without a figure. Wherefore, expect from hence no sufficient light for the knowledge of him. Give faith to what is of faith.

CHAPTER FIRST.

Legitimate Mode of Delivering.

I PERCEIVE, my son, that many, in bringing forward, or, on the other hand, in concealing the knowledge of things which they conceive themselves to have attained, do noways conduct themselves according to their credit and duty. With equal detriment, though perhaps with less blame, do those also offend, who, though of excellent qualifications, are yet imprudent, and possess no art or precepts concerning the several modes of propounding things. Yet need we not make complaint regarding this malignity or ignorance in the teachers of knowledge. If, indeed, through the unskilfulness of teaching they were to destroy the importance of things, one might be angry not without cause; but we ought to consider that the importunity of teaching doth even by right belong to the impertinences of things. But far different from these, when I am going to impart to thee, not the fictions of ingenuity, nor the shadows of words, or the devotion mingled therewith, nor certain popular observations, or certain noble experiments trimmed up into fables of theory, but in truth to bind and make over unto thee nature with her offspring; does the argument I have before me seem worthy of being polluted by the ambition or ignorance or faultiness of any sort with which it is treated? May I be such, my son, and may I so extend to its given limits the narrowness, never enough lamented, of man's empire over the universe, (which, of things human, is my sole wish,) that most faithfully and from the deepest providence of my mind, and the well explored state of things and of minds, I may deliver these to thee in the most legitimate mode of all. But now, which (thou wilt say) is that legitimate mode? Dismiss all art and circumstance, exhibit the matter naked to us, that we may be enabled to use our judgment. And would that you were in a condition, dearest son, to admit of this being done. Thinkest thou that, when all the accesses and motions of all minds are besieged and obstructed by the obscurest idols deeply rooted and branded in, the sincere and polished areas present themselves in the true and native rays of things? A new method must be entered upon, by which we may glide into minds the most obstructed. For, as the delirium of phrenetics is subdued by art and ingenuity, but by force and contention raised to fury; so, in this universal insanity we must use moderation. What? Are these conditions trifling which pertain to the legitimate mode of communicating knowledge? Do they seem to thee so free and easy, that the method is innocent, that it affords no handle or occasion for error? that it has a certain inherent and innate power of conciliating belief and repelling the injuries of time, so that knowledge thus delivered, like a plant full of life's freshness, may spread daily and grow to maturity? that it will set apart for itself, and, as it were, adopt a legitimate reader? And, whether I shall have accomplished all this or not, I appeal to future time.

CHAPTER SECOND.

BUT, plainly, I dissemble not, my son, that in some way I must remove those philosophasters, fuller of fables than the very poets, the ravishers of minds, falsifiers of things; and much more, also, their satellites and parasites, that professorial and money-gaming crowd: who dictates the song, that I may devote them to oblivion? For, what silence can there be for truth, when they are thus clamorous with their brutish and inarticulate reasons? But, perhaps, it were safer to condemn them by name, lest, while they flourish with such authority, if not named they may seem to be excepted, or lest any might conceive, seeing such severe and mortal hatred at work amongst them, and such contentions, that I were sent to these battles of larves and shadows to give assistance to the other side. Let us, then, summon Aristotle, worst of sophists, crazed with useless subtlety, base laughing-stock of words. At a time when the human mind, carried by some chance as by favourable weather to somewhat of truth, did rest, he ventured to lay the severest shackles on the mind, and to compose a kind of art of insanity, and to bind us to words. Nay, also, out of his bosom have been produced and nourished those most cunning prattlers, who, when they had turned away from all perambulation of this earth, and from all light of things and of history, exhibited to us, chiefly from the exceeding ductile materials of his precepts and positions, and from the unquiet agitation of their own ingenuity, the manifold sweepings of the schools. But this their dictator is so much the more to blame that they, since even when engaged in the evident things of history, he brought back the darkest idols of some subterranean den; and erected even upon the history itself of particular things certain works as of spiders, which he wished to seem causes, whereas they are utterly without strength or value. Such also in our times hath Geronimo Cardano constructed, both at variance with things and with himself. Yet, augur not, my son, that while I entertain this opinion against Aristotle. I have conspired with his rebel, a certain Pierre Ramus. No commerce have I with this nest of

ignorance, most pernicious moth of letters, who twists and presses things with the chains of his method and compendium, till the things, indeed, if any there be, escape altogether and leap out; but he himself grasps the arid and most deserted trifles. And Aquinas, indeed, with Scotus and his fellows, contrived a variety of things, even when their subjects were nonentities; but this man hath, even on subjects having real existence, produced the vacuity of nonentity. And although he is such a man, yet doth he impudently talk of uses to mankind, so that even when compared with the sophists he seems to prevaricate. But let us dismiss these. And now let Plato be summoned, that polite caviller, tumid poet, insane theologian. And, surely, when thou wast filing and putting together I know not what philosophic rumours, and simulating knowledge by dissembling it, and tempting and loosening men's minds with vague inductions, thou mightest either have ministered discourses to the feasts of literate and polite men, or also grace and love to ordinary discourses. But, when thou didst counterfeit truth, which is as it were the indigenous inhabitant of the human mind, migrating from nowhere else, and didst turn aside our minds, which are never sufficiently applied and brought back to history and to things themselves, and teach them to enter into themselves, and under the name of contemplation to wallow amid their blind and most confused idols, thou didst then commit a capital offence. And afterwards, with scarcely less naughtiness, didst thou introduce an apotheosis of folly, and dare to defend with religion thy meanest cogitations. For it is a slighter evil that thou hast been the parent of philologers, and that under thy guidance, and the auspices of thy manifold genius, ensnared and satisfied with fame and the popular and smooth jucundity of the knowledge of things, they did corrupt the severer investigation of truth. Among these were Marcus Cicero, and Annæus Seneca, and Plutarch of Chaeronea, and many others nowise equal to these. Let us now proceed to physicians. I see Galen, a man of the narrowest mind, a forsaker of experience, and a most vain pretender. Art not thou he, Galen, who took away even the infamy of ignorance and indolence in physicians, and put them in safety, the most sluggish definer of their art and duty? who, by declaring so many disorders to be incurable, proscribest so many of the sick, cutting off their hope and the industry of physicians. O, dogstar! O, pestilence! Eagerly seizing and displaying thy fiction of mixture, the prerogative of nature, and thy sedition between the heat of stars and of fire, deceitfully reducest human power to order, and seekest to defend for ever thy ignorance by despair. Thou art unworthy to be longer detained. Thou mayest also take away with thee thy fellows and confederates, the Arabians, the framers of dispensatories, who, in theories as madly as the rest, did, more copiously indeed, from the supinest conjectures, compound the promises rather than the aids of vulgar medicines. Take also thy companions the careless crowd of moderns. Ho! Nomenclator, call them. But he replies, they are unworthy of having their names preserved by him. As, however, I recognise certain grades among triflers of this kind, the worst and most absurd sort are those who in method and accurate discussion comprehend universal art, and are usually applauded for their elocution and arrangement; such is Fernelius. Those do less harm, who display a greater variety and propriety of observations, though deluded with and immersed in the most foolish pretences; as Arnoldus de Villa Nova, and others the like sort. I perceive, on the other side, the cohort of chymists, among whom Paracelsus boasts himself above the rest; who by his audacity merits separate correction. What oracles of Bacchus dost thou pour out in thy new meteorics, thou rival of Epicurus? Yet he, as if asleep, or doing something else, did in this matter as it were commit his opinions to fate. Thou, more foolish than any fate, art ready to swear to the words of the absurdest falsehood. But let us see thy other works. What mutual imitations of the fruits of thy elements? what correspondencies; what parallels dreamest thou, O fanatical joiner of idols! for thou hast made man indeed a pantomime. Yet, how notable are those interpunctions, thy species namely, by which thou hast broken the unity of nature. Wherefore I can better endure Galen weighing his elements, than thee adorning thy dreams. For the occult properties of things excite him, but thee the common and promiscuous qualities. Meanwhile, unhappy we, that dwell amid such odious impertinences! But how eagerly this most skilful impostor inculcates the triad of principles, a fiction not altogether useless, and somewhat allied to things! Hear still graver charges! By mingling things divine with things natural, profane and sacred, heresies with fables, thou hast polluted (O, sacrilegious impostor!) truth, both human and religious. The light of nature (whose most sacred name thou so often usurpest with impure mouth) thou hast not hid, like the sophists, but extinguished. They were the deserters of experience, thou the betrayer. Subjecting by rule the crude and masked evidence of things to contemplation, and seeking the Proteuses of substances according to the computations of motions, thou hast endeavoured to corrupt the fountains of knowledge, and to strip the human mind; and thou hast increased with new and adscititious windings and tediousness of experiments, those to which the sophists were averse, and the empirics unequal; so far art thou from having followed or known the representation of experience. And also the boastings of the Magi

thou hast everywhere done thy utmost to amplify, forcing the most importunate cogitations by hope, and hope by promises, at once the contriver and the work of imposture. Among thy followers, Paracelsus, I envy thee none but Petrus Severinus, a man not deserving to spend his life amid such impertinences. Surely thou art much indebted to him, Paracelsus, because he rendered the things which thou (O, adopted of asses) used to bray, harmonious and pleasant, by a certain melody and modulation, and most agreeable diversity of words, converting the odiousness of falsehoods into the delights of fable. Yet I pardon thee, Severinus, if, weary of the learning of sophists, which is not only fruitless, but professedly courteth despair, thou soughtest other supports for our decaying affairs. And when those pretensions of Paracelsus presented themselves, commended by the proclamations of ostentation, and the subterfuges of obscurity, and the affinities of religion, and other adornments, thou didst surrender thyself with a certain impulse of indignation to these, not fountains of things, but openings of hope. Thou wouldst have acted rightly and in order, if from the maxims of ingenuity thou hadst turned to the decrees of nature, which would have held out to thee not only art short, but also life long. And now, having passed sentence against Paracelsus, I perceive the rest of the chymists fixed in astonishment. They immediately acknowledged his decrees, which he himself promulgated rather than established, and fortified by arrogance, (plainly not after the ancient discipline,) instead of caution; when, indeed, these men, reconciled to each by much reciprocation of lying, everywhere hold forth abundant hope, and, wandering through the by-ways indeed of experience, do at times, by chance, not conduct, hit upon some things useful. Yet in their theories they (as disciples of the furnace) have not withdrawn from their art. But, as that wanton youth, when he discovered a boat upon the shore, sought to build a ship; so these coalmen, from a few experiments of distillations, have attempted to erect a philosophy, which is everywhere obnoxious to those most absurd idols of separations and liberations. Yet I count them not all alike; forasmuch as there is a useful sort of them, who, not very solicitous about theories, do by a kind of mechanic subtlety lay hold of the extensions of things; such is Bacon. There is a base and detestable sort, who everywhere seek applause for their theories, by religion, hope, imposture, wooing, and supplicating for it; such is Isaac Hollandis, and by far the greater part of the rabble of chymists. And now let us summon Hippocrates, the creature of antiquity and the seller of years, to whose authority, when both Galen and Paracelsus with much zeal strive to betake themselves, as to the shadow of the ass, who bursts not into laughter? And truly this man seems to cling to experience with perpetual steadfast looking, yet with eyes not moving and inquiring, but stupid and enfeebled. Afterwards, his sight recovering somewhat from the stupor, he receives certain idols, not indeed those huge idols of theories, but the more elegant which encompass the superficies of history; on swallowing which swelling, and half a sophist, and (after the manner of his age) sheltered by brevity, he at length (as these two think) sets forth his oracles, of which they seek to be esteemed the interpreters; while in reality he does nothing but either deliver certain sophistications in sentences abrupt and suspended, thus withdrawing them from confutation; or invest with stateliness the observations of rustics. And nearest (as is commonly believed) to his precepts, which are not so unsound as useless, approaches Cornelius Celsus, but a more intense sophist, and more bound to history modified, sprinkling the same moral moderation upon the progress of knowledge, and amputating the extremes of error, not rooting out the principles. And, regarding these, what we have said is most true. But I now hear thee, my son, inquiring whether, perhaps, as is done, they have not sought after the worst parts, especially as the state of knowledge is always almost democratic? Hath not time, like a river, brought down to us the light and inflated, and sunk the solid and weighty? What of those ancient inquirers after truth, Heraclitus, Democritus, Pythagoras, Anaxagoras, Empedocles, and others, known by the writings of others, not by their own? Lastly, what deem you of the silence and the secrets of antiquity? My son, (that I may answer these inquiries, as is usual with me, for thy benefit,) I recognise a few fragments of antiquity, (of books found I speak not,) yet these as specimens rather of the diligence and ingenuity, than the knowledge of their authors. But, if I hint that those searchings of conjectures respecting things, which, with their footsteps, have fled away, are laborious; and that, for me, studying the utility of mankind for time coming, it were unfitting to turn back to the philology of antiquity. I know sufficiently that in thy modesty thou wouldst acquiesce. Nevertheless, that thou mayest perceive what two-faced prophets things present are, and how they bring before us things both past and future, I have resolved to gratify thee with tables of both times, (which may comprise not only the courses and flowings of knowledge, but also other provisions of things.) And do not augur what this may be, before seeing it, for the true anticipation of this matter falls not to thee, and if it come not from thy hand, seek it not. For, in this matter, my son, I shall gratify some of you, and conciliate the minds of the more delicate. Knowledge, indeed, is to be sought from the light of nature, not recovered from the obscurity of antiquity. Nor is it of importance what may have been done; we have only to see

what can be done. If a kingdom, subdued by arms and victorious war, were delivered to thee, wouldst thou frame questions whether or not thy ancestors had possessed it, and solicit the rumours of genealogies? So much for the recesses of antiquity. But, concerning those leaders of sects, whom thou hast named, and many more of like sort, it is easy to decide. Variety is proper to error, unity to truth. And, unless the politics and provisions of the times had been adverse to the peregrinations of such minds, many other regions of error would have been wandered over. For, an immense ocean encompasses the island of truth, and men have still to endure new damages and scatterings from the winds of idols. Nay, even two or three days ago, Bernardinus Telesius mounted the stage, and enacted a new play, neither frequent in applause nor elegant in argument. Dost thou not observe, my son, that the contrivers, both of eccentrics and of epicycles, and the charioteers of the earth, delight in the impartial and ambiguous advocation of phenomena? It is exactly so in universal theories. For, as if any one, knowing only the use of his vernacular tongue, (attend, my son, for this is very similar,) undertake to write an unknown speech, in which, observing some few words approaching in sound and letters to those of his own language, he immediately and confidently assumes them to be of the same signification, (though more frequently far removed from it;) then, by collating these together, with much labour of ingenuity, but also much liberty, he divines the remaining sense of the oration; altogether, such also are those interpreters of nature found to be. For, each bringing his idols, (I speak not now of those of the stage, but especially of the market and of the den,) like diverse vernacular tongues, to history, immediately seizes the things which sound somewhat alike; from the symmetry of these the rest are interpreted. And now it is time, my son, for us to recover and purge ourselves, seeing we have been handling (though with purpose of importing) things so profane and polluted. But, against all these I have said less than their guilt deserved. Yet, perhaps, thou comprehendest not this censure. For, be assured, my son, the judgment I have pronounced against them is nothing less than contumely. For, I have not conducted myself like Velleius with Cicero, a declaimer and philologist cursorily touching opinions, and rather casting them away than destroying them, or, like Agrippa the modern, in speech of that kind not to be named indeed, but a trivial buffoon, distorting every thing and holding it out to ridicule; (unhappy me, who, in defect of men, am forced to compare myself with brutes!) But, on looking back afterwards, thou wilt discern, under the veil of reproach, wondrous airs of accusations, with singular art contracted and reduced almost to single words, and with keenest glance directed and brandished against the very ulcers themselves of offence. And, when they might have been much mingled and entangled together in their crimes and guilt, I have, by their most peculiar marks, but those capital, condemned them singly. For, the human mind, my son, puffed up with the incursions and observations of things, contrives and educes very various species of error. But Aristotle is as a taller plant of one species, so also Plato, and others besides. Yet thou requirest particular confutations. Verily, it were a great sin against the golden fortune of mankind, the pledge of empire, for me to turn aside to the pursuit of most fleeting shadows. One bright and radiant light of truth, my son, must be placed in the midst, which may illuminate the whole, and in a moment dispel all errors. Certain feeble and pale lamps are not to be carried round to the several corners and holes of errors and falsehoods. Wherefore, my son, detest what you were seeking; for it is very profane. But now I hear thee asking, is all that the whole of these have asserted altogether false and vain? Truly, my son, this is unhappiness and that prodigious, not ignorance. For, no man does not, at times, hit upon something true. When Heraclitus remarked, that knowledge is to be sought by men in private worlds, not in the common world, I perceive that he sacrificed well at the entrance of philosophy. Democritus, I think, did not unhappily philosophize, when, attributing immense variety and infinite succession to nature, he set himself against almost all other philosophers, the slaves of custom, and given over to secularities, and by this opposition bringing both errors into collision, destroyed both, and opened some way for truth between the extremes. The numbers of Pythagoras I set down as also of good omen. Dindamus, the Indian, I commend, for having called custom antiphysis. And, to Epicurus disputing against the explication of causes, (as they speak,) by intentions and ends, though childishly and philologically, I nevertheless not unwillingly listen. Pyrrho, also, and the vacillating academics, talking from the skiff, and conducting themselves against idols, like certain morose lovers, (who are always reproaching their loves, but never desert them,) I use for the sake of the mind and of hilarity. Nor without cause: for idols drive others straight forwards, but these in a circle, which is pleasanter. Lastly, I should wish to have Paracelsus and Severinus for criers, when, with such clamours, they convoke men to the suggestions of experience. What then? are they possessed of truth? Nothing less. And, my son, some proverbs of rustics are apposite to truth. If the sow with her snout should happen to imprint the letter A upon the ground; wouldst thou, therefore, imagine that she could write out a whole tragedy as one letter? Of a far different sort is the truth revealed from the

analogy of knowledge, and the truth from the section of an idol. The former is constant and indefinitely germinous, the latter discordant and solitary. Which happens also in works. Gunpowder, if it had been invented by conduct, not chance (as they speak) and accident, would not have come forth solitary, but with great frequence of noble inventions, (which fall under the same meridian.) So also the rest, both works and principles. Wherefore I admonish thee, if perhaps any idol of any of these hath in any point determined my truth, that is, the truth of things, not to think more highly of them, or less of me, since it is sufficiently apparent from their ignorance of the rest, that those things themselves they have not said from the analogy of knowledge. But thou still urgest, my son: would you, therefore, order all their writings to be converted into wrappings for incense and perfumes? That I should not have said. For there remains yet a short while some use of them, slight and narrow, and far different from that which they were destined for, and now usurp, but still some. Add to this that there are many other writings obscurer in fame, but more excellent in use. The morals of Aristotle and of Plato many admire; yet Tacitus breathes more living observations of manners. But at length in the proper place I shall say, what utility can be derived from writings, and which are superior in utility to the rest, and which smallest part of them are gifts of those things which contribute to the interpretation of nature. Lastly, my son, I hear thee inquiring: dost thou suffice thyself in place of all these? I shall reply, and that not dissemblingly, but from my inmost sense. I, dearest son, will confirm to thee a sacred, chaste, and legitimate marriage with things themselves. From which intercourse (above all wishes of marriage songs) thou shalt beget a most blessed progeny of heroes, who shall subdue the infinite necessities of man, more fatal than all giants, and monsters, and tyrants; and for your affairs procure a placid and festal security and plenteousness. But were I, my son, to commit thee to the giddy intricacies of experience with a mind unpurged of idols, verily thou wouldst soon desire a leader. Yet by my simple precepts, without the knowledge of things, thou canst not, however much thou mayest wish it, divest thyself of idols. In tables, unless you erase what has before been written, you can write nothing else. But in the mind, on the contrary, unless you inscribe something else, you cannot erase what has before been written. And although this may be done, although thou mayest put off the idols of friendship, yet indeed, being uninitiated, there is danger that thou mayest be overwhelmed by the idols of the way. Thou hast too much accustomed thyself to a leader. At Rome, tyranny being once established, the oath in the name of the Roman senate and people was ever afterwards vain. Confide and give thyself to me, my son, that I may restore thee to thyself.

OF THE INTERPRETATION OF NATURE.

Accounting myself born for the use of mankind, and judging the case of the commonweal to be one of those things which are of public right, and like water or air lie open to all; I sought what might be of most advantage to men, and deliberated what I was most fitted for by nature. I discovered that nothing is of such estimation towards the human race, as the invention and earnest of new things and arts, by which man's life is adorned. For I perceive that, even in old times among rude men, the inventors and teachers of things rude were consecrated and chosen into the number of the gods; and I noted that the deeds of heroes who built cities, or were legislators, or exercised just authority, or subdued unjust dominations, were circumscribed by the narrowness of places and times. But the invention of things, though it be a matter of less pomp, I esteemed more adapted for universality and eternity. Yet above all, if any bring forth no particular invention, though of much utility, but kindleth a light in nature, which from the very beginning illuminates the regions of things, which lie contiguous to things already invented, afterwards being elevated lays open and brings to view all the abstrusest things; he seems to me a propagator of the empire of man over the universe, a defender of liberty, a conqueror of necessities. But I found myself constructed more for the contemplations of truth than for aught else, as having a mind sufficiently mobile for recognising (what is most of all) the similitude of things, and sufficiently fixed and intent for observing the subtleties of differences, and possessing love of investigation, patience in doubting, pleasure in meditating, delay in asserting, facility in returning to wisdom, and neither affecting novelty, nor admiring antiquity, and hating all imposture. Wherefore I judged my nature to have a kind of familiarity and relationship with truth. Yet seeing by rank and education I was trained to civil affairs, and, like a youth, sometimes staggered in my opinions, and conceived I owed my country something peculiar, and not equally pertaining to all other parts, and hoped, if I obtained any honourable degree in the commonwealth to perform with greater help of ingenuity and industry what I had intended; I both learned civil arts, and with all ingenuousness and due modesty, commended myself to my friends who had some power. And in addition to this, because those things of whatever kind penetrate not beyond the condition and culture of this life, the hope occurred that I, born in no very prosperous state of religion, might, if called to civil offices, contribute somewhat to the safety of souls. But when my zeal was imputed

to ambition, and my age was matured, and my disordered health also admonished me of my unhappy slowness, and I next considered that I nowise fulfilled my duty, while I was neglecting that by which I could through myself benefit men, and applying myself to the things which depended upon the will of another, I altogether weaned myself from those thoughts, and wholly betook myself to this work, according to my former principle. Nor is my resolution diminished, by foreseeing in the state of these times, a sort of declination and ruin of the learning which is now in use; for although I dread not the incursions of barbarians, (unless, perhaps, the empire of Spain should strengthen itself, and oppress and debilitate others by arms, itself by the burden,) yet from civil wars (which, on account of certain manners not long ago introduced, seem to me about to visit many countries) and the malignity of sects, and from those compendiary artifices and cautions which have crept into the place of learning, no less a tempest seems to impend over letters and science. Nor can the shop of the typographer suffice for those evils. And that unwarlike learning, which is nourished by ease, and flourishes by praise and reward, which sustains not the vehemency of opinion, and is the sport of artifices and impostures, is overcome by the impediments which I have mentioned. Far different is the nature of the knowledge whose dignity is fortified by utility and operation. And from the injuries of time I am almost secure; but for the injuries of men I am not concerned. For should any say that I savour things too high, I reply simply, in civil affairs there is place for modesty, in contemplations for truth. But if any one require works immediately, I say, without any imposture, that I, a man not old, frail in health, involved in civil studies, coming to the obscurest of all subjects without guide or light, have done enough, if I have constructed the machine itself and the fabric, though I may not have employed or moved it. And with the same candour, I profess that the legitimate interpretation of nature, in the first ascent before arriving at a certain degree of generals, should be kept pure and separate from all application to works. Moreover, I know that all those who have in some measure committed themselves to the waters of experience, seeing they were infirm of purpose, or desirous of ostentation, have at the entrance unreasonably sought pledges of works, and have thence been confounded and shipwrecked. But if any requires at least particular promises, let him know that by that knowledge, which is now in use, men are not skilled enough even for wishing. But, what is of less moment, should any of the politicians, whose custom it is from personal calculations to estimate every thing, or from examples of like endeavours to form conjecture, presume to interpose his judgment in a matter of this sort, I would have told that ancient saying, "claudus in via, cursorem extra viam antevertit," and not to think about examples, since the matter is without example. But the method of publishing these things is, to have such of them as tend to seize the correspondences of dispositions, and purge the areas of minds, given out to the vulgar and talked of; to have the rest handed down with selection and judgment. Nor am I ignorant that it is a common and trite artifice of impostors to keep apart from the vulgar certain things which are nothing better than the impertinences they set forth to the vulgar. But without any imposture, from sound providence, I foresee that this formula of interpretation, and the inventions made by it, will be more vigorous and secure when contained within legitimate and chosen devices. Yet I undertake these things at the risk of others. For none of those things which depend upon externals concerns me: nor do I hunt after fame, or, like the heretics, take delight in establishing a sect; and to receive any private emolument from so great an undertaking, I hold to be both ridiculous and base. Sufficient for me is the consciousness of desert, and the very accomplishment itself of things, which even fortune cannot withstand.

J. A. C.

TRUE HINTS

ON

THE INTERPRETATION OF NATURE.*

Outline and Argument of the Second Part of the Instauration.

KEEPING then in view our plan, we shall exhibit the whole subject perspicuously, and with orderly distribution of the parts. Wherefore, let us now unfold the design and arrangement of this second part. We devote this part to the doctrine of a better and more perfect use of reason than hath heretofore been known or promulgated to men, with purpose (as far as the terms of this mortal state permit) to aggrandize and enlarge the human intellect with power to conquer and interpret the mystery of nature. To the interpretation itself we have dedicated three books, the third, the fourth, and the fifth; for the sixth, which consists of anticipations drawn from the ordinary use of reason, it is to be taken only as temporary and provisional, and when in time it shall have begun to acquire solidity, and to be verified by the methods of legitimate reason, it is shifted, and, as it were, migrates of itself into the sixth.

But to this second book is apportioned the intellect itself, its treatment and regulation, and the entire system of preparation and training leading to the right conduct of the understanding. And although the term logic or dialectics, by reason of the depravations of the art, sounds repulsive in our ears, yet to lead men as it were so far by the hand in their wonted tracts, we acknowledge the art which we profess to be of the nature of logic,—so far as logic (the common logic, I mean) supplies aids and constructs defences for the intellect. Yet ours differs from the received logic, besides other points of opposition, principally in three; namely, its mode of entering on inquiry, its order of demonstration, and its end and office. It goes deeper to find a foundation and basis for inquiry, by subjecting to investigation what the received logic admits as it were on the credit of others, and in a blind submission to authority, principles, primary notions, and the informations of the senses; and it reverses downright its order of demonstration, by making propositions and axioms, in an unbroken line, ascend and mount on a ladder of elevation, from recorded facts and particular experiments to generic verities, not by darting without a pause to principles and the higher generalizations, and from them deducing and inferring intermediate truths. Again, the end of this our scheme of science is, that things and works, not reasonings and speculative probabilities, may be invented and brought to the test.

Such then is the scope of the second book. Let us now, in like manner, set forth its arrangement. As in the generation of light it is requisite that the body which is to receive the rays be made smooth and clean, and then planted in a position or conversion duly adapted to the illumination, before the light itself is introduced, even so we must proceed now. For, first the area of the mind must be levelled out and cleared of those things which have hitherto encumbered it; next, there must be a turning of the mind well and fittingly to the objects which are presented; lastly, information must be exhibited to the mind thus prepared for its reception.

Now, the extirpating part is threefold, according to the three several classes of idols which beset the mind. For such idols are either adoptive, and that in two ways, having invaded and established themselves in the mind from the systems and sects of philosophy, or from an abuse of the laws and methods of demonstration; or, secondly, they are such as are inseparable from and indigenous in the essence of the mind. For as an uneven and ill-cut mirror distorts the true rays of things according to its own incurvation of surface; so, too, the mind, subjected to the impression of objects through the senses, in performing its operations, interchanges and mixes up its own nature with that of its objects, so as it may not be implicitly trusted.

Wherefore the first task imposed upon us is to disperse utterly, and to expatriate all that army of theories which has figured in so many well-fought combats. To this we add a second, the emancipation of the mind from the slavery imposed on it by perverted laws of demonstration; which is followed by a third, namely, to master the seductive bias of the mind itself, and either to extirpate its native idols, or, if they cannot be rooted up, so to point them out and thoroughly comprehend them, that deviations may be recta-

* The first part of this tract forms the preface to the Novum Organum, translated by Mr. Wood, vol. iii. p. 000, 000.

fied. For it would be futile, and perhaps pernicious, merely to overturn and explode errors in philosophy, if from the incorrigible grain of the mind a new off-shoot of errors, perhaps even degenerated from their predecessors, should sprout; and not till all hope is precluded, of perfecting philosophy, or enlarging its empire by the exercise of ordinary reason, and by the helps and aids of the received logic, ought we to abandon and discard them; lest haply we do not thereby banish, but only change our errors. Wherefore that part of the book which we term the destroying, consists of a threefold argument of redargution or exposure; redargution of the philosophies; redargution of the demonstrations; and redargution of human reason in its natural course.

And it does not escape us, that without so immense a revolution, no small accretion to science might result from our labours, and celebrity be attainable by a smoother path. Nevertheless, being uncertain when the same views may enter the mind of any other man, we have determined to make a full and free profession of our creed.

After having levelled the area of the mind, it follows in order, that we must place the mind in an advantageous position, and, as it were, in a kindly exposure to the rays of what we propound. For since, in a matter of novelty, not merely the violent preoccupation of old opinion, but also a false preconception or conjectural picture of that which is offered, disposes to prejudice, we must also apply a remedy to this disorder, and the mind must not only be disencumbered but prepared. That preparation is nothing more than to have true opinions of that which we allege imparted provisionally only, as it were, and by way of loan, previous to a thorough knowledge of the thing itself. Now, this mainly depends on shutting out, and holding in abeyance those foul and malign suspicions, which, we may easily augur, will, from the prejudices now in vogue, as from the contagion of an epidemic fanatical gloom, seize upon men's minds; wherefore it behoves us to see, as Lucretius hath it,

"Ne qua
Occurrat facies inimica atque omnia turbet."

First, then, if any one think that the secrets of nature remain shut up, as it were, with the seal of God, and by some divine mandate interdicted to human wisdom, we shall address ourselves to remove this weak and jealous notion, and, relying on simple truth, shall bring the inquiry to this issue, not only to silence the howl of superstition, but to draw religion herself to our side. Again, if the idea should occur to any one, that great and scrupulous delay in experiments, and the tossing about, so to speak, on a sea of matter and particular facts, which we impose on men, must needs plunge the mind into a very Tartarus of confusion, and cast it down from the serenity and coolness of contemplative wisdom, as from a far diviner state—we shall show and establish, as we trust, forever, (not without putting to the blush the whole of that school which hesitates not to concede divine honours to fantastic reveries, utterly bereft of solidity,) the difference that prevails between the ideas of the divine and the idols of the human mind. Those also to whom, absorbed in the love of meditation, our frequent mention of works sounds harsh, uncouth, and mechanical, shall be instructed how much they war against the attainment of their own object of desire, since exact clearness of contemplation, and the invention of works, its under platform, depend upon and are brought to perfection by the same means. If any one should still hold out, conceiving of this absolute regeneration of science from its elements, as a thing interminable, vast, and infinite, we shall demonstrate that, on the contrary, it ought to be regarded as a true boundary and a circumscribing line, marking off the region of error and waste land; and we shall make it manifest, that a just and full inquisition of particulars, without attempting to embrace individuals, gradations, and vermiculate differences, (which is enough for the purposes of science;) and then notions and truths, raised from and upon the former, in just method, form something infinitely more defined, tangible, and intelligible, sure of itself, and clear both in what hath been done, and what remains to be accomplished, than floating systems and abstract subtleties, of which there is indeed no end, but a ceaseless gyration, whirl, and chaos. And though some sober censor, (as he may think himself,) applying to this subject that diffidence of consequences which becomes civil prudence, should consider what we now say to be like men's vain aspirations—an indulgence only of wild hope—and that in truth nothing else will follow from this remodelled state of philosophy, than that new doctrines, perhaps, are substituted, but the resources of mankind not at all augmented—such a one we shall, as we conceive, induce to admit, that we are doing any thing but founding a system or a sect, that our institution differs wholly and generically from all that have hitherto been attempted in philosophy and the sciences—and that there is the surest promise of a harvest of works, if men will only not forestal the same by hastening to cut the first worthless vegetation of muscus and weeds, and grasping with a childish passion and vain precipitation at the first pledges of works. And in handling the points we have enumerated, enough, we think, shall have been done to guard against that species of prejudice which is inspired by false and illiberal notions of the thing propounded; and therewithal we judge that our second part, which we call the preparatory, is complete;—after every adverse gust from religion, from theoretical speculation, and from civil wisdom, with its handmaids, distrust, phleg-

matic coldness, and the like, shall have sunk and died away.

Yet to form a preparation in all respects perfect, it seems still to be wanting, that we remove the stagnation of mind, which is generated by the utter novelty of our plan. This unfriendly torpor is only dispelled by the explanation of its causes; for it is the knowledge of its causes alone that solves the prodigy, and puts an end to the stupor of astonishment. Wherefore we shall here note all those perverse and troublesome obstacles by which true science hath been checked and retarded, so that it is not at all astonishing that men should have been so long involved, and toiled on, in the meshes of error.

And in this part of the subject one thing will felicitously come in, as a solid reason for hope, namely, that although the true interpretation of nature, wherein we toil, be justly held most difficult, yet by far the greatest part of that difficulty depends upon what lies within our own power and admits of correction, not on things placed beyond our sphere of capacity; I mean in the mind, not in things, or in the senses.

Now, if any one deem that scrupulous care with which we strive to prepare men's minds is uncalled for—that it is of the nature of parade, and got up for purposes of display, and should therefore desire to see denuded of all circumlocution and the scaffolding of preliminaries, a simple statement; assuredly such an insinuation, were it founded in truth, would come well recommended to us. Would that it were as easy for us to conquer difficulties and obstructions, as to cast away idle pomp and false elaboration. But this we would have men believe, that it is not within due exploration of the route, that we pursue our path in such a desert, especially having in hand such a theme, as it were monstrous to lose by incompetent handling, and to leave exposed, as by an unnatural mother. Wherefore, duly meditating and contemplating the state both of nature and of mind, we find the avenues to men's understandings harder of access than to things themselves, and the labour of communicating not much lighter than of excogitating; and, therefore, which is almost a new feature in the intellectual world, we obey the humour of the time, and play the nurse, both with our own thoughts and those of others.

For every hollow idol is dethroned by skill, insinuation, and regular approaches; whereas by violence, by opposition, and by irregular and abrupt attacks, it is exasperated into energy. Nor does this take place only because men, enslaved by admiration of certain authors, or bloated with self-sufficiency, or reluctant from some habit, will not exert their candour. Even were any one willing in the utmost degree to exact of himself impartiality as a duty, and to forswear, as it were, every prejudice, it does not follow that we are to repose unlimited confidence in the award of a mind so disposed. For no man by mere energy of will commands his intellect, the spirits of the philosophers (as it is written of the prophets) are not subject to the philosophers. Wherefore it is not the honesty, candour, or openness to conviction of other men, which we are to confide in for support, but our own care, address, and conciliation.

In which respect no small difficulty is further created to us from our own character, having laid it down as an inviolable law evermore to hold fast our integrity and ingenuousness, and not to seek an entrance for truth through hollow ways, but so to regulate our compliance as by no subtle deception, by no imposture or aught that resembles imposture, but only by the light of order and the skilful grafting of new shoots upon the healthier part of the old, to hope for the attainment of our desires. Wherefore we return to this assertion, that the labour consumed by us in paving the way, so far from being superfluous, is truly too little for difficulties so considerable.

Leaving, therefore, the preparatory part, we now come to the informing, and shall exhibit a simple and bare outline of that art which we intend.

The things which make for the perfecting of the intellect in the interpretation of nature, may be divided into three ministrations to the same, ministration to sense, ministration to memory, and ministration to reason. In ministration to the senses we shall make exposition of three things, first, how a good notion is collected and elicited, and how the testimony of sense, which is ever according to the analogy of man, may be reduced and rectified to the analogy of the universe. For we do not attach much weight to the immediate perceptions of sense, except only in so far as it manifests motion or change in its objects. Secondly, we shall show how those things which baffle the sense, either by intangibility of the entire substance, or by minuteness of parts, or by remoteness of place, or by slowness or celerity of motion, or by habitual familiarity of the object, or otherwise, may be brought under the jurisdiction of sense, and placed at its bar; and, furthermore, in cases where they cannot be produced, what is then to be done; and how such deficiency may be filled up by skilful noting of gradations, or by informations as to inanimate bodies derived from the analogy of corresponding sentient ones, or by other modes and substitutions. In the last place, we shall speak of a Natural History, and the method of performing experiments; what that Natural History is, which will serve as a foundation for philosophy; and again what method of experimenting, in the want of such natural history, must be resorted to; wherein we shall also interweave some observations as to calling forth and arresting the attention. For there are many things both in natural history and in experiments, present to knowledge, absent to use,

because the apprehensive faculty hath been feebly drawn forth to note them.

Ministration to the senses is comprehended in three particulars. The senses are to be furnished with materials, with helps where they *fail*, and helps where they *err*. To the materials of the senses are appropriated history and experiments, to their short-comings, fit substitutions, to their declination, rules of correction.

Ministration to memory hath this for its function; out of the mass of particular facts, and the accumulation of facts forming natural history general, it extracts a history particular, and arranges it in such order, that the judgment can forthwith act, and do its office. For it befits us prudently to calculate the powers of the mind, and not to hope that they can expatiate at large over the infinity of nature. For it is manifest that the memory is defective and incompetent when it attempts to embrace the endless variety of things, and, no less, that in the choosing out of such as bear on some defined field of inquiry, it is unpractised and unprepared. Now, as regards the former malady, the mode of curing it is easy. It is performed by one rèmedial rule, which is, that no investigation or invention be entertained which is not drawn from a written statement of results. For it were the same for one confident in the strength of memory to try to grasp the whole interpretation of nature on a given subject, as to endeavour to seize and perform by rote the problems of astronomy. Besides, it is sufficiently apparent how small is the province we allot to mere memory of discourse of reason, seeing we do not authenticate discovery, even when detailed in writing, save by digested tables. To the latter defect, therefore, we must devote more attention. And, doubtless, after the subject has been measured off and defined for inquiry, and stands clear and unencumbered out of the mass of things, the ministration to memory seems to consist of three operations or offices. First, we shall show what those things are which, in regard to the subject given or propounded, seem, on glancing over its history of facts, the proper points for inquiry, which forms a kind of argument or topic. Secondly, in what order these ought to be marshalled, and digested in regular tables. Nevertheless, we expect not that the true vein of the subject, being of the analogy of the universe, can be discovered at the outset of the inquiry, so that the division might follow from it, but only the apparent one, so as to suggest some sort of partition of the subject. For truth shall sooner emerge from falsehood than from disorder, and reason more easily rectify the division, than penetrate the unsubdued mass. Then, in the third place, we shall show in what method and at what time the inquisition is to be recommenced, and the charts or tables preceding to be brought forward to new charts, and how often the inquisition is to be repeated. For we intend the first series of charts or results to form, as it were, moveable axes, and to constitute only the verifying part of the inquisition; for we have no hope of the mind's ever pursuing and securing its rightful dominion over nature, unless by repeated action. The ministration, therefore, to memory consists, as we have said in three doctrines, of the topics of discovery, of the reduction into tables, and of the method of fully establishing the inquiry.

Ministration to reason remains, to which the two former parts are only ancillary. For by them there is no building up of axioms, but only the production of simple notions with an orderly narration of facts, verified, indeed, by the first ministration, and so exhibited by the second, as to be, so to speak, placed at our disposal. Now, that ministration to reason, claims to be most highly approved, which shall best enable reason to perform its office and secure its end. The office of reason is in its nature one, in its end and use double. For the end of man is either to know and contemplate, or to act and execute. Wherefore the design of human knowledge is to know the causes of a given effect or quality in any object of thought. And again, the design of human agency is, upon a given basis of matter, to build or superinduce any effect or quality within the limits of possibility. And these designs, on a close examination and just estimate, are seen to coincide. For that which in contemplation stands for a cause, in operation stands for a mean, or instrument; since we know by causes and operate by means. And, doubtless, if all the means which are required, to what operations soever, were supplied to man's hand at pleasure, there would be no especial use in treating of the two disjunctively. But since man's operation is tied up within much narrower circumscription than his knowledge, because of the innumerable necessities and limitations of the individual, so that for the operative part there is often demanded not so much a wisdom all-comprehensive and free to range over possibility, as a judgment sagacious and expert in selecting from what is immediately before us; it is consistent with this, to consider these things as more happily treated of apart. Wherefore we shall also make like division of the ministration to reason, according as the ministration is to reason active or contemplative.

As respects the contemplative part, to say it in a word, all evidently turns on one point. And that is no other than this, that a true axiom be established, or the same be made conjunctive with other axioms, for this is gaining a portion of the solid of truth, whereas a simple notion isolated, is so to speak but its surface. Now, such axiom is not elicited or formed, save by the legitimate and appropriate forms of induction, which are-

lyses and divides experience, and by proper limitations and rejections comes to necessary conclusions. Now the popular induction (from which the proofs of principles themselves are attempted) is but a puerile toy, concluding at random, and perpetually in risk of being exploded by contradictory instances: insomuch that the dialecticians seem never once to have thought of the subject in earnest, turning from it in a sort of disdain, and hurrying on to other things. Meantime this is manifest, that the conclusions which are attained by any species of induction are at once both discovered and attested, and do not depend on axioms and middle truths, but stand on their own weight of evidence, and require no extrinsic proof. Much more then is it necessary that those axioms which are raised according to the true form of induction, should be of self-contained proof, surer and more solid than what are termed principles themselves; and this kind of induction is what we have been wont to term the formula of interpretation. Therefore it is, that we desire to be careful and luminous, in exposition, above all other topics, of the construction of the axiom and the formula of interpretation. There remain, however, subservient to this end, three things of paramount importance, without explication of which, the rule of inquisition, though potent in the effect, may be regarded as operose in the application. These are the *continuing*, *varying*, and *contracting* of the inquiry, so that nothing may be left in the art either half done, or inconsistent, or too much lengthened out for the shortness of man's life. We shall therefore show in the first place the use of axioms (supposing them discovered by the formula,) for inquiring into and raising others higher and more general, so that by a succession of firm and unbroken steps in the ladder of ascent, we may arrive at the unity of nature. In this part, however, we shall add the mode of examining and attesting these higher axioms by the experimental results first obtained, lest we again fall down to conjectures, probabilities, and idol systems. And this is the method which we term the *continuing* of the inquiry.

The *varying* of the inquisition accommodates itself to the different nature, either of the causes to ascertain which the inquiry is set on foot, or of the things or subjects about which the inquiry is occupied. Therefore, discarding final causes, which have hitherto utterly vitiated natural philosophy, we shall commence with an inquiry, on the plan of varying and adaptation, into forms, a branch which has hitherto been abandoned as hopeless, and not unreasonably. For no one can be so privileged either in his powers of mind or in his good fortune, as to detect the form of any thing by means of presumptive conjectures and scholastic logic. Then follow the divers sorts of matter and of efficients. Now, when we use the terms matter and efficients, we do not point to ultimate efficients, or to matter taken generically, (such as are discussed in the disputations of the schools,) but to proximate efficients and preparations of matter. Lest men should labour in these, however, by a vain repetition and refining of experiments, we shall in this part introduce the doctrine of discovering latent processes. Now, we give the name of latent process to a certain series and gradation of changes, formed by the action of an efficient and the motion of parts in matter subjected to that action. The varying of the inquiry as it respects its subjects is derived from two states of things, either from their elementary or compound character, (for there is one modification of the inquiry adapted to things simple, another to things compound, or decomposed, or ambiguous,) or from the copiousness or poverty of the natural history which may have been collected to advance the inquiry. For when the history is rich in facts, the progress of the inquisition is prompt; when limited, it is labour in shackles, and demands manifold assiduity and skill. So, then, by handling the points we have now recounted, we shall have, as it seems to us, sufficiently discussed the varying of the inquiry.

There remains the *contracting* of the inquiry, so as not only to demonstrate and make patent a way in places pathless before, but a short cut in that way, and as it were a straight line of progression, which shall go direct through circuitous and perplexed routes. Now this (like every other kind of abridging) consists mainly in the selection of things. And we shall find that there are in things two prerogatives, so to speak, of sovereign efficacy in abridging investigation, the prerogative of the instance, and the prerogative of that which is inquired into. Wherefore, we shall point out in the first place what those instances or experiments are, which are privileged above the rest to give forth light, so that a few of them afford as much weight as a multitude of others. For this both saves accumulation of the history and the toil of beating about indefinitely. We shall, then, expound what are the subjects of inquisition, from which the investigation ought to borrow its prelibation of omens, as those which being first disposed of, carry, as it were, a torch before their successors, either by reason of their own consummate certainty, or generic quality, or from their being indispensable to mechanical trials. And here we close the ministration to reason regarded in its character of contemplative.

The doctrine of the active part of reason and its ministration, we shall comprehend in three directions, first, premising two admonitions to open an entrance into the minds of men. The first of these is, that in the inquiry, proceeding according to the formula laid down, the active part of reason should have a perpetual intercommunion with the contemplative. For the nature of things constrains that the propositions and

axioms inferred and trained down to particular and practical uses, by process of reasoning, should yield only a sort of guesses, exceedingly obscure and imperfect. Whereas an axiom drawn from particulars to new and corresponding ones, leads on investigation in a broad and indestructible path. The other premonition is this, that we remember that, in the active branch of the inquiry, the business is to be accomplished by means of the ladder of descent, the use of which we waived in the contemplative. For every operation is occupied about individual experiments whose place is at the bottom of all. We must, therefore, descend the steps that lie between general truths and these. Nor, again, is it practicable to get at these by means of axioms taken unconnectedly; for every practical operation, and the mode of performing it, is at once suggested and effected by applying a combination of isolated axioms. With these preliminaries, then, we come to our threefold exposition of the doctrine of active interpretation. The first part propounds a defined and appropriate method of inquiry, in which not the cause or governing axiom, but the effecting of any operation is the object in view, and is submitted to examination. The second shows the way of making general tables with a special view to practice, in which may be much more easily and readily found all sorts of suggestions and indications of works. The third subjoins a mode of ascertaining and striking out new practical uses, an incomplete mode, no doubt, and yet not without utility, which travels from one experiment to another, without deducing of axioms. For, as from axiom to axiom, so from experiment to experiment, there is presented and opened up a passage to discovery, narrow indeed and slippery, yet not to be wholly passed over in silence. And here we conclude the ministration to practice, being the last in the order of distribution. This, then, is a plain and succinct abstract of the second book.

These things being unfolded, we trust to have well constructed and furnished withal, the marriage chamber of mind and the universe, the divine goodness not disdaining to be bridemaid. Let it then be the votive part of the nuptial hymn, that from their union may rise and descend a progeny of helps to man's life, a line, so to speak, of heroes to conquer and command the wants and the miseries of humanity.

At the conclusion, we shall add some remarks on the combination and the succession of scientific efforts. For then, and not till then, shall men know their own strength, not when multitudes devote themselves as now to the same tasks, but when some shall appropriate what is neglected by the rest. Nor, truly, have we abandoned hope of aftertimes, that there shall rise up men to advance to a nobler state a work commencing from such slender beginnings. For it is borne in upon our mind, that what is now done, from the supreme importance of the good it contains to man, is manifestly of God. And in His workings, every the most insignificant germ of the future is pregnant with results.

Now, in the redargution of the received philosophies which we intend, we scarcely know whither at first to turn ourselves, since the avenue to confutation of the same, which was to others open, is to us inhibited. And, besides, so many and so vast are the troops of error which present themselves, that we must overthrow and dislodge them, not in close detail but in mass: and if we would draw near unto them, and try conclusions, hand to hand, with each of them individually, it were in vain: the rule of all reasoning being set aside, differing as we do from them in our principles, and repudiating as we do the very forms and authority of their proofs and demonstrations. And if (which seems to be the only thing left for us to do) we attempted to infer and derive from experience the truths we maintain, we are only turning back to the starting point. And, forgetting what we have discoursed of the preparing of men's minds, we are found going directly the opposite way: and falling all at once and prematurely on nature; to which we have pronounced it absolutely necessary that we open up and pave a way, because of the obdurate prejudices and impediments of the minds of men. Nevertheless, we shall not be wanting to ourselves, but shall try to confront them, and prove our strength, in manner accommodated to our design, both by producing certain tokens from which an estimate may be formed of these philosophies, and meanwhile noting among the philosophies themselves, so as to shake their authority, certain prodigies of perversion, and laughingstocks to intelligence, which they furnish.

Yet it escapes us not that the mass of such errors is too much consolidated to be at once overthrown; especially as among learned men, it is no unusual or unheard-of arrogance, wilfully to reject opinions which they cannot shake. Nor shall we offer aught too light or low for the grandeur of the interest which is at stake, nor in this sort of redargution attempt to make converts to our creed, hoping only meantime to conciliate patience and candour, and that only in minds of a more commanding and decisive order. For no one can betake himself to us, fresh from the habitual and unceasing companionship of such errors, with such openness and greatness of mind, as not to retain some bias to his impressions and opinions in favour of inveterate and established systems. You cannot inscribe fresh characters on the writing-tablet without expunging the former ones; but, in the mind, you will scarcely obliterate the first drawn characters, save by inscribing others.

This bias, as we think, ought to be counteracted,

and these our statements have this scope, (we speak it without reserve,) to lead men willing, not to drag them reluctant. All forcing, (as we from the first professed,) we would banish: and as Borgia jestingly noted of the invasion of Italy by Charles the Eighth, that the French had come with chalk in their hands to mark the public houses, not arms to force their way through the land; so we too anticipate a like pacific tone and result of our discoveries, namely, that they shall segregate minds of large capacity from the crowd, and into these shall make their way, rather than be obnoxious to men of opposite opinions.

But in this part of our subject, in which we now treat of the redargution of the vulgar philosophies, our task hath been happily lightened by a timely and extraordinary circumstance. For while meditating these points, there came to me a certain friend, then returning from France, of whom, after due courtesy done, I inquired much, as he (in the wont of intimate friends) of me, in regard of our various affairs. "But how do you employ," said he, at length, "those intervals which are unoccupied with public business, or at least wherein its bustle abates." "A question in good time," I answered; "lest you should suppose I do nothing at all in such hours, I must tell you, I now meditate a renovation of philosophy, which shall embrace nothing airy or abstract, and which shall advance the interests of mankind." "A noble undertaking, doubtless," said he; "but whom have you for associates in this work?" "None at all," was my reply; "I have not even a person with whom I can converse without reserve on such subjects, none at least in whose converse I can explain myself, and whet my purpose." "A hard fate," he said, "yet know," he immediately added, "that others have also at heart such subjects." Whereupon I exclaimed with joy, "Precious raindrop of hope, that hast at last sprinkled my thirsty spirit, and recalled me to life. Why, I met not long ago a certain evil-eyed old fortune-telling woman, who, muttering I know not what, prophesied that my offspring should die in the desert." "Would you," said he, "that I mention a circumstance relating to such matters, which I met with myself in France?" "Most willingly," I replied, "and shall be grateful besides."

He then related that he had, while at Paris, been invited and introduced by a friend of his to an assembly of personages, "such," said he, "as you too would have loved to see. No occurrence of my life was ever more delightful than that introduction. There were about fifty present, none young, but all mature of years, and of whom each in his aspect wore a stamp of dignity and of honour." He related, that among them he recognised men who had held offices of state, others senators of the realm, divers eminent ecclesiastics, and some generally of all the notable classes of the body politic. And when he entered at first, he found them occupied with easy converse one with another, yet they were ranged on seats placed with some formality of order, and sate as if expecting some one's coming.

Not long after there came to them a personage of an aspect, as he thought, mild and exceedingly placid, yet the comportment of his features was as of one that pitied men. And, when they all stood up to receive him, he looked around, and said with a smile, "I could never have conceived, now that I recognise your features, one after another, that the idle hour of all of you should have fallen upon the same nook of time, and I cannot enough admire how it hath so occurred." Whereupon one of the assembly made answer, that it was he himself that had occasioned that leisure, seeing that what they expected to reap from him, they regarded as preferable to all business. "I perceive," he answered, "that the whole waste of the time here consumed, in which each of you, if apart, might have benefited many, is to be charged to my account. If this be so, I must see, in good sooth, that I detain you not over long." With these words he sate down, not on an elevated seat or academic chair, but on a level with the rest, and discoursed to the assembly, somewhat to the following effect. For my informant said, that he tried as he might to catch up the address, but while going over his remembrances of it with the friend who had introduced him, they seemed far short of what had then been spoken. He then produced a specimen of the speech which he had taken down, and which he had then about him.

"My sons, ye are doubtless but men and mortal, yet will ye not so much repine at the terms of your being, if ye sufficiently remember your nature. God, the creator of the world and of you, has endowed you with souls to contain that world, and yet remain unfilled and unsatisfied. Wherefore he has claimed your faith for himself, but the world he hath submitted to your sense; and hath decreed that the oracles of both should not be clear, but ambiguous, so as profitably to exercise you, and to balance the excellency of the things discovered. Now, as regards truths divine, my hope of you is good: but as concerns things human, I am in fear for you, lest you be involved in a train of endless errors. For I consider, that you are intimately persuaded of one thing, namely, that you now enjoy a flourishing and auspicious state of science. I on the other hand admonish you, not to regard the copiousness or utility of the knowledge you possess, as if you had been exalted to some pinnacle of superiority, or had satisfied your aspirations, or completed your labours. Revolve the matter thus:

"If you take to task the whole of that huge congeries of writings wherewith the sciences are so puffed out and overgrown, and mark them with a strict and sifting scrutiny, you shall everywhere

note infinite repetitions of the same thing, diversified in words, arrangement, examples, and illustrations, yet in the sum and weight and real effect of things all anticipated, and manifestly only repetitions, so as there is at once poverty and parade, arrogance and miserable jejuneness. And if I may be allowed a colloquial ease and pleasantry on this subject, this learning of yours very much resembles the well known supper of the host of Chalcis, who being asked whence he had such store of different hunter's fare: answered that all his dishes were of the flesh of a tame boar. For you will not deny that the whole of that seeming copiousness is nothing but fragments of the philosophy of the Greeks, and that not reared, to continue the metaphor, in the woods and wilds of nature, but styed up in the schools and scholastic cells like the domesticated animal. For, if you give up the Greeks, and a few Greeks too, what (I pray you) have the Romans or Arabs, which doth not emanate from, and fall back into, the systems of Aristotle, Plato, Hippocrates, Galen, Euclid, and Ptolemy? Thus you see your entire hopes and fortunes wrapt up in the weak brains and limited souls of about half-a-dozen mortals. Yet it was not for this that God implanted in you reasonable souls, that you should obsequiously give up to human beings that part of you which he vindicates for himself,—implicit faith due only to the things of God. Nor hath he allotted to you the firm and vivid informations of the senses, to contemplate the works of a few men, but his own works, his heaven and earth, celebrating the while his glory in your hearts, and while you lift up a hymn to your Great Author, admitting, if you will, these mortals (and wherefore should you refuse) to a place besides you in the worshipping choir." W. G. G.

THE PHENOMENA OF THE UNIVERSE;

OR,

NATURAL HISTORY.

FOR THE BASIS OF NATURAL PHILOSOPHY.

PREFACE.

Upon my taking into consideration the errors that prevail with respect to the true grounds of forming theories and conducting experiments, I felt it my duty myself to remedy these evils, to the best of my ability. There cannot indeed be any thing more meritorious than to lead men to throw off the masks of authorities and their blind admiration of experiments, and to enter into a nearer communion with things themselves, and a thorough investigation of them. For so our knowledge of them will be at once deep and secure, and will be moreover at hand, and the sources of utility will be multiplied. But the first principles of this design must be derived from the knowledge of nature. For all the philosophy of the Greeks, with all their different sects, and, indeed, whatever other philosophy may be mentioned, appears to have been built upon too narrow a basis, and on an insufficient acquaintance with nature. For, taking up some few things from experience, and from tradition, and that sometimes without accurate examination, they placed the rest in meditation and in the exercise of their ingenuity; relying too much upon dialectics: but the chymists and the whole class of mechanics and empirics, if they conducted their observations and philosophy with more boldness, being accustomed to an accurate nicety in some things, bend all others by the most singular methods to them; and give out opinions the most monstrous and unnatural. For the one class, out of many things take but little, the other out of but little take much into the body of their philosophy; and, to speak the truth, the method of either class is unsound, and will not hold. But the knowledge of nature which has been hitherto collected, however copious it may at first sight appear, is really meagre and unprofitable. Neither is it of that kind for which we are inquiring. Nor is it yet cleared of fable and absurdity, but runs out into antiquity and philology, and relations of things unconnected with it, neglecting and rejecting what is solid, but laboriously curious upon trifles. But the worst of this kind of copiousness is this, that it embraces the investigation of natural objects, and yet for the most part declines the study of things mechanical. And these are the very things which by far excel the others in the searching out the secrets of nature, for, nature being of itself vast and diffuse, dissipates the mind and confounds it by its variety. But in mechanical operations the judgment is collected, and the designs

and workings of nature are discerned, and not the effects only. And, besides, all the subtlety of mechanics stops short of the object which we seek. For the person thus employed being intent upon his work and object, neither raises his mind nor stretches forth his hand to other things, and which perchance avail more to the investigation of nature. There is need, therefore, of greater care and choice kinds of examination and even of expense, and moreover of the greatest patience. For this hath rendered every thing in the department of experiment useless, that men have from the beginning sought out experiments for the sake of gain and not of knowledge, and have been intent upon bringing out something magnificent, not upon revealing the oracles of nature, which is the work of works, and comprehends all power in itself. And this evil hath been occasioned by the fastidious curiosity of men, in generally turning their attention to the secrets and rarities of nature, and in expending all their research upon these, passing over experiments and ordinary observations with contempt. And they seem to have been determined to this choice either from the pursuit of applause, or from having fallen into this error, that the office of philosophy is as much to trace the cause of ordinary occurrences and the remoter causes of those causes, as it is to harmonize extraordinary with ordinary events. But the cause of this universal complaint respecting natural history is chiefly this, that men have not merely erred in their mode of proceeding, but in their design. For that natural history which now exists seems to have been composed either on account of the profitableness of experiments or the pleasure of details, and to have been made for its own sake, and not to serve as the elements, and as it were to be the nurse of philosophy and the sciences. It is therefore my design, as far as lies in my power, to supply this deficiency. For I have long since made up my opinion as to the province of abstract philosophies: it is my intention also to adhere to the methods of true and good induction, in which are contained all things; and, as it were, by the help of instruments, or, by a clue to a labyrinth, to assist as much as possible the power of the human understanding, of itself inadequate and very unequal to the attainment of the sciences. And I am at the same time aware that if I would include in that restoration of the sciences, which I have in contemplation, any greater scope, I might indeed reap the greater honour.

But since it has pleased God to give me a mind that can learn to yield to circumstances, and out of a sense of real desert and confidence of success to reject with readiness what is only plausible, I have taken upon myself that part of the work which would probably have been passed over by others altogether, or would not have been treated in accordance with my design. And there are two admonitions which I would give on this head, as at other times, so especially now, in proceeding to this very thing: first, that we should dismiss that motion, which, though so thoroughly false and destructive, easily takes possession of the mind, that the investigation of particular objects is an infinite and endless task: when the truth rather is, that there is no bound to mere opinions and disputes, but that those fantasies are condemned to perpetual error and endless uncertainty: but that those particular objects and the informations of sense (taking out individuals and degrees of things, which suffices for the investigation of truth) certainly admit of comprehension, and that neither too wide and extensive, nor too difficult and adventurous. And, secondly, that men frequently bear the object in mind, and that when they fall upon the consideration of very many of the most ordinary, small, and apparently trivial and even low subjects, and which, as Aristotle says, seem to require a previous apology, they will not think that I am trifling, or taking down the dignity of the human mind. For these things are not sought out or described for their own sakes, but no other way is open to the human understanding, nor any other method left of pursuing this work; since we are attempting an object of unrivalled importance, and most worthy of the human mind, to kindle in this our age, through means offered and applied by the Deity himself, the pure light of nature, the name indeed the boast of men, the thing itself entirely unknown. Nor do I dissemble my opinion that that preposterous subtlety of arguments and imaginations in the time of which the subtlety and truth of the first information or true induction was either passed over or ill set on foot, can never effect a restoration, though all the genius of past ages should unite in the design; but that nature like fortune has her hair only upon her forehead. It remains, therefore, that the work be entirely recommenced, and that, with greater helps, and laying aside the heats of opinion, an entrance be opened into the kingdom of philosophy and of the sciences, (in which all the wealth of man is stored, for nature is overcome only by yielding,) in the same manner as into the kingdom of heaven, into which we cannot enter but as little children. But the profit of this work, that plebeian and promiscuous advantage derived from experiments themselves, we do not altogether condemn, since it can doubtless marry desirable suggestions to the observation and invention of men according to their various arts and talents. But we deem it extremely small in comparison of that entrance into human knowledge and power, which, through the divine mercy, we look for. And of that mercy we again desire, that it may see fit to enrich anew the human family through our hands.

The nature of things is either free, as in species, or confused, as in monsters, or straightened, as in

the experiments of the arts; but it acts in whatever class are worthy of commemoration. But the history of species which at present exists, as of animals, metals, and fossils, is tumid and impertinent; the history of prodigies vain and grounded upon slight reports; the history of experiments imperfect, tried by parts, treated negligently, and made entirely with a view to action and not philosophy. It is, therefore, my design to contract the history of species, to examine and revise the history of prodigies, and to put forth my principal labours upon experiments mechanical and artificial, and upon the subjection of nature to the hand of man. For what are the sports and wantonings, as it were, of nature to us? that is, those trifling differences of species according to their forms, which are of no service to our pursuits, and with which natural history, nevertheless, teems. The knowledge of things wonderful is, indeed, pleasant to us, if freed from the fabulous, but on what account does it afford us pleasure? not from any delight that is in admiration itself, but because it frequently intimates to art its office, that from the knowledge of nature it may lead it whither it sometimes preceded it by its own unassisted power. To artificial experiments we entirely attribute the first place in kindling the light of nature, not so much because they are highly useful of themselves, but because they are the most faithful interpreters of natural occurrences. Would any one, for instance, have so clearly explained the nature of lightning or of the rainbow, before the reason of both was demonstrated, of the one through the instruments of war, of the other through the artificial resemblances of the rainbow on the wall. But if they are faithful interpreters of causes, they will also be certain and successful signs of their effects and operations. And I shall not depart from this threefold division of my history to treat each subject separately, but shall mix the kinds themselves, natural with artificial, ordinary with extraordinary, and keeping close to every subject in proportion to its utility.

It is usual to begin with the phenomena of the air. But in strict adherence to my object, I should prefer those phenomena which constitute and produce a more common nature of which both globes partake. We will begin, therefore with the history of bodies according to that distinction which appears the simplest, that is, the quantity or paucity of matter contained and extended within the same space or the same boundaries. For as no axiom in nature is more certain than that twofold one, that out of nothing, nothing comes, and that there is not any thing which can be reduced to nothing, but that the quantum itself of nature, or the universal sum of matter, is ever the same, admitting neither of increase nor of diminution; so it is not less certain, although it has not been so clearly remarked or asserted, (whatever men may pretend respecting the power of matter being equally proportioned to its forms,) that out of that quantum of matter more or less is contained under the same dimensions of space, according to the difference of the bodies by which they are occupied, of which some are very evidently found to be more compact, others more extended or diffused. For a vessel or a cavity filled with water and air cannot receive the same portion of matter, but the one more and the other less. If, therefore, any one were to assert that from an equal quantity of air an equal quantity of water could be produced, it would be the same with asserting that something could be produced out of nothing. For that must, of course, be supplied out of nothing which is supposed to be wanting in matter. Again, if it were asserted that an equal quantity of water could be turned into the same quantity of air, it would be the same with asserting that something could be reduced to nothing. For the superfluous matter must, of course, have vanished into nothing. And I do not doubt that this will admit of calculation imperceptible in some respects, but definite and certain, and known to nature. As, if one were to say, that a body of gold compared with a body of spirit of wine were a collection of matter exceeding in a ratio of twenty to one, or thereabout, he would speak the truth. In setting forth, therefore, that history which I have spoken of respecting the quantity and paucity of matter, and the union and expansion of matter, from which those notions of density and rarity (if rightly considered) have their rise, I shall preserve this order; in the first place, to give an account of the relative proportions of different bodies, (as of gold, water, oil, fire,) and having examined the ratios of different bodies, I will afterwards treat of the retirings and excursions of the same body, with calculations or proportions. For the same body, without accession or subtraction, or with the smallest possible degree of either, from various impulses both external and internal is able to gather itself into a greater and lesser sphere. For sometimes the body endeavours to return to its former sphere, and sometimes evidently exceeds it. In the first place, then, I will enumerate the courses, differences, and proportions of any natural body, (in relation to its extent,) comparing them with its interstices or pores, that is, its pulverizations, calcinations, vitrifications, dissolutions, distillations, vapours, exhalations, and inflammations. In the next place, I shall lay down the actions and motions themselves, the extent and bounds of the contraction and dilatation, and when the bodies return to themselves, and when they exceed according to the measure of their extent; but I shall note particularly the efficients and means through which this kind of contractions and dilatations of bodies follow, and, in the mean

time, shall subjoin by the way, the powers and actions which accrue to bodies from such compressions and dilatations.

And as I well know how difficult it is in the present state of the mind to acquire a familiarity with nature now from the very elements, I shall add my own observations, in order to excite the attention and raise the thoughts of others. But with respect to demonstration, whether as to the discovery of the density and rarity of bodies, I have no doubt that, with respect to thick and palpable bodies, the motion of gravity, as it is called, can be assumed as the best as well as readiest proof; for the gravity of a body will be in proportion to its compactness. But after we have come to the class of ethereal and spiritual substances, then indeed we have no measure or rule whereby to go, and shall need another method of investigation. But we will begin with gold, the heaviest of all bodies within our knowledge, (for philosophy is not yet so matured as that we ought to venture an opinion respecting the bowels of the earth,) and embraces the greatest quantity of matter in the smallest space; and we shall apply the ratios of other bodies to the sphere of this; intimating, however, that here we scarcely touch upon the history of weights, except as far as it may throw light upon the demonstrating of the dimensions of bodies. But as our design is not to publish conjectures, but to discover and gain knowledge, and this appears to lie in the examination and proof of the first experiments, I have determined in every very subtile experiment to subjoin the mode of experiment I have made use of, that after it is clearly ascertained how each thing by itself appears to me, men may see how far they may rest satisfied, and what further remains to be done, whether in the correction of errors which may still cleave to the work, or in the calling forth and employing of more accurate modes of proof. And I will for my own part diligently and sincerely intimate those subjects which appear to me to be less satisfactorily explored, and to lie, as it were, nearer and more open to error. Lastly, I will add my own observations, as I before said, so that whilst every part of philosophy is preserved entire, I may yet even by the way turn the face itself of natural history toward philosophy. It will be my care also to remark whatever those things are, whether experiments or observations, which occur and intervene beside the scope of inquiry, and pertain to other denominations, that the investigation may be kept distinct.

A TABLE OF THE CONJUNCTION AND EXPANSION OF MATTER THROUGH SPACE IN TANGIBLE BODIES, WITH A CALCULATION OF THEIR RATIOS IN DIFFERENT BODIES.

That occupy the same space, or are equally extended.

	As oz.	dwt.	gr.	
Of pure gold	20	0		1
quicksilver	19	9		2
lead	12	1½		3
Of silver	10	21		4
tin glass	10	13		5
copper	9	8		6
chalciform gold	9	5		7
steel	8	10		8
brass	8	9		9
iron	8	6		10
tin	7	22		11
the loadstone	5	12		12
the touchstone	3	1		13
marble	2	22½		14
flint	2	22½		15
glass	2	20½		16
crystal	2	18		17
alabaster	2	12		18
rock salt	2	10		19
common loam	2	8½		20
white loam	2	5½		21
nitre	2	5		22
ox bones	2	5		23
powdered margarites	2	2		24
sulphur	2	2		25
common earth	2	1½		26
white vitriol	1	22		27
ivory	1	21½		28
alum	1	21		29
oil of vitriol	1	21		30
white sand	1	20		31
chalk	1	18½		32
oil of sulphur	1	18		33
common salt	1	10		34
lignum vitæ	1	10		35
sheep's flesh	1	10		36
aqua fortis	1	7		37
ox's horn	1	6		38
Indian balsam	1	6		39
red sandal wood	1	5		40
agate	1	5		41
new onion in the lump, or fresh	1	5		42
camphire	1	4		43
fresh dry fig root	1	4		44
ebony	1	3½		45
seeds of sweet fennel	1	3½		46
clear amber	1	3		47
vinegar	1	3½		48
verjuice of sour apples	1	3		49
water	1	3	a little under.	50
urine	1	3		51
oil of date leaves	1	2	a little under.	52
claret	1	2½		53
white sugar	1	2½		54
red wax	1	2		55
hina root	1	2		56
subtance of raw winter pear	1	2		57
distilled vinegar	1	1		58
distilled rosewater	1	1		59
ashes	1	0½		60
benjamin	1	0		61
myrrh	1	0		62
butter	1	0		63
fat	1	0		64
oil of sweet almonds	0	23½		
oil extracted from green mace	0	23½		
herb sweet marjoram	0	22		
petroleum	0	22		
flower of rose	0	22		
spirit of wine	0	22		
oak	0	1		
soot	0	17		
fir	0	15		

The Mode of Experiment upon the above Table.

Let the weights which I have used be understood to be of the same kind and computation with those of goldsmiths', a pound being twelve ounces, and an ounce twenty pennyweights, a pennyweight twenty-four grains. I have chosen gold as a standard of the ratios of other bodies, according to the measure of its extension, not so much because it is the heaviest of bodies, as because it is the most unique. For, other bodies, which, in some degree, partake of inconstancy even after they have been tried by fire, retain diversity of weight and dimension; but pure g

appears to be entirely free from this property, and to be the same in all circumstances. The experiment adopted in this case was this: I made an ounce of pure gold into the form of a cube; I then prepared a small square vessel to receive that body of gold, and to agree with it exactly, except that it was a little too high; yet, so as that there might be marked, by a distinct line, a space within the vessel in which the gold cube might ascend. I did that for the sake of fluids, that, when any fluid was to be put into the same vessel, it might not flow over, but, by this method, be more conveniently preserved in an accurate measure. I had, at the same time, another vessel made, in size and weight equal with the former, that, in a like vessel, the ratio of the contents of the body might appear by itself. Then, I had made cubes of the same magnitude or dimensions in all those materials specified in the table, which were capable of division. But, the fluids I made use of at the time, by filling the vessel until the fluid ascended to the place that was marked; and the powders in the same manner; but those as closely pressed as possible; but this with an especial view to their lying even and not suffering injury. The proof, therefore, was no other than that, one of the vessels being empty, should be put with an ounce in one scale, another of the vessels in another, with a body in the lump, and the ratio of the weight be taken; so that, in the proportion of its diminution would the dimensions of the same body be increased. For example, when a cube of gold gives one ounce, but one of fat a pennyweight, it is clear that the extension of the body of gold, compared with the extension of the body of fat, has a twentieth ratio. It was desirable, also, that the mode should be noted down of the measure which comprehended an ounce of gold; it was that of a pint of wine, according to English measure, a fraction a little less than two hundred and sixty-nine. The proof was this: I marked the weight of the water which was in the vessel, under the line aforesaid, and then the weight of water contained in a pint, and collected the ratios of the measures from those of the weights.

Cautions.

Observe whether, perchance, a closer contraction of the body from the united force produce a greater ratio of weight than is in proportion to the matter, whether or not this be the case, will appear from the peculiar history of the weight. If it should be so, the calculation is certainly erroneous, and the more bodies are extended, so much the more of matter they possess, than is in proportion to the calculation of weight and measure which depends upon it.

The smallness of the vessel which I made use of, and the form of it, although very convenient for the receiving of the beforementioned cubes, was not equally suitable for the taking of the ratios with the strictest accuracy. For it could not well receive particles beneath a half or a quarter of a grain, and that square surface, in a small and imperceptible ascent or altitude, was capable of attracting a remarkable difference in the weight contrary to what it is in vessels rising to a point.

3. There is no doubt, that very many bodies noted in the table receive more or less within their species, according to weight and dimension. For, waters, wines, and the like, differ from one another in gravity. Therefore, as it respects the minutest calculation, the thing itself receives some modification; neither can the individuals, upon which our experiment falls, decide with exactness the nature of the species, nor, perhaps, agree minutely with experiments made on others.

4. I have set down in the above table those bodies which could conveniently fill the space or measure, each with its body in the lump, and could, as it were, be assimilated, and from the ratios of the weight, of which a judgment might be formed respecting the collection of matter. Three kinds of bodies, therefore, could not be brought into our computation; first, those which would not satisfy cubical dimension, such as leaves, flowers, fibres, membranes; 2dly, bodies with unequal pores and cavities, as sponges, fleeces, and cork; 3dly, pneumatic bodies are without weight.

Observations.

The collection of matter in those tangible bodies which have come under my observation, is within the ratios of twenty-one parts, or thereabout. The collection of matter is found most compact in gold, and most expanded in spirits of wine, (we speak of bodies which are whole and not porous.) For spirit of wine occupies a space twenty times, and that repeated, of the space which gold does, according to the ratios of one ounce to twenty-two grains. For, of those twenty-one parts, of which some are more compact than others; metals occupy thirteen parts, for tin, the lightest of metals, is almost eight pennyweights, thirteen, that is to say, below that of gold. For, all this kind of variety, leaving metals, is confined within those eight remaining parts, and, again, that remarkable variety which, by beginning inclusively from stones, is extended to those other subjects, is confined within three parts only, or but little more. For the touchstone, the heaviest of stones, (excepting the loadstone,) preponderates by little more than three pennyweights. But spirit of wine, the limit of levity in compact bodies, is lighter by little less than one pennyweight. A great gap presents itself from gold and quicksilver to lead, namely, from twenty pennyweights and a little under, to less than twelve. And, although great metallic bodies

abound in variety, I am not inclined to suppose that there are any intermediate bodies, excepting, perhaps, the elements of quicksilver. From lead there is a gradual ascent to iron and tin. Again, there appears a great hiatus between metals and stones, namely, from eight to three pennyweights; for such, or about such, is the distance from tin to the touchstone. Only between these comes the loadstone, and almost on a par, and this is a metallic stone; and, probably, other fossils may be found of imperfect mixture, and of a nature compounded between stone and metal. From stones, indeed, to the other bodies, there is a gradual variation.

But we little doubt that, as to vegetables, and also in the parts of animals, they show themselves more than other bodies, although of sufficiently equal texture, which surpass spirit of wine in lightness. For, even the wood of the oak, which is firm and solid, is lighter than spirit of wine, and the wood of the fir much more. And very many flowers and leaves, and membranes and fibres, as the skins of serpents, the wings of insects, and the like, would doubtless approach the lesser ratios of weights, (if they were capable of cubic dimension,) and much more artificial substances, as tinder, the leaves of roses after distillation, and the like.

We generally find, as to the parts of animals, some bodies more compact than in plants. For, bones and skins are more compact than woods and leaves; for, we must correct that proneness which the human mind entertains toward conjecturing that bodies are hard and consistent, in proportion to their compactness and solidity, but that fluids are naturally less contracted. For, a collection of matter is not less in fluids than in solids, but rather more. Gold, by a certain softness which it possesses, verges to a fluid state, and, when liquefied, is not extended, but is contained within its former place. And quicksilver flows of itself, and lead easily flows, iron with difficulty, of which the one is a very heavy, the other a very light body. But this is especially to be noted, that metals which are frangible (fluids, to wit) far exceed stones in weight.

It is very remarkable of gold and quicksilver, which are so much heavier than other metals, that they are found sometimes in grains and small particles, as if perfect by nature and commonly pure, which happens to no other metals, which must unite and be purified by fire, whereas these two, the conjunction of which is by far the greatest and the strictest, is natural and without the aid of fire.

In the investigation of the nature of metals and stones, some inquiry should be made respecting those metals which are found lower than others and are deeper in the earth, as to whether there is any certain rule and standing experiment on this head. But here we must take into the consideration the region in which the mines or quarries are found, whether it be higher ground or whether lower. And in the same manner as to stones and diamonds that are crystals, whether the stony nature penetrate the earth so deeply as the metallic, or rather attaches only to the surface, which appears the more probable supposition.

Sulphur, commonly deemed the father of metals, though generally not so by the learned, or sulphur transferred to a kind of natural and not common sulphur, has a collection of matter inferior to every kind of metal and even to stones and the stronger earths, by two pennyweights and two grains; and yet, (if other circumstances concur,) if mixed up with mercury, on account of the admirable gravity of this latter, it could give the weights of all metals according to the ratio of the temperament, except the weight of gold.

The efficient of conjunction in bodies is not always considered in respect to their accumulation. For glass, which joins by means of a fierce and powerful fire, outweighs crystal, which is its original nature, and is extracted without fire or apparent heat; for as to ice being a solid, that is a popular error, and crystal itself is much heavier than ice, which is plainly kept together by cold, and yet it floats upon the water.

The mixture of liquors does not depend upon or arise from the ratios of their weights only, since the spirit of wine is not mixed with distilled oil of almonds, but (what would not appear probable) floats upon oil as oil upon water; and yet (as may be seen from the table) is only lighter by a grain and a half. But at the same time spirit of wine is by far more easily mixed with the spirit of water, though heavier; and as water itself is more easily mixed with oil of vitriol than with oil of olives; and yet oil of vitriol is heavier than water by eighteen grains, but oil of olives lighter by four. But this is not to be received without a particular consideration of the weight in bodies proportioned according to the mixture. For we see that wine floats upon water, if the agitation is repressed or there is a perturbation of the descent or first state; as when into a vessel in which water is contained you pour wine, but with a piece of bread or cloth intervening, which would break the power itself of the first condition. And the same takes place in water poured upon oil of vitriol with this design. And what is more; although wine be first poured in and afterwards water (upon the bread or cloth as aforesaid,) it finds its own place, and passes through the wine and settles itself.

Continuation of the History of the Conjunction and Expansion of the Matter in the same Body.

I deem that our investigation into the ratios of powders will be attended with greater utility if we compare them with the bodies themselves, in their complete state, and do not consider them

simply by themselves. For by this means a judgment may be formed respecting the difference of the bodies and concerning those connexions and chains of their perfect nature which are the closest. But in the ratios of powders, we understand powders as compressed as possible. For this conduces to their evenness, and does not suffer accident. Mercury in the lump has in that experimental measure on which the table proceeds, 19 dwt. and 9 gr., but sublimated in powder, 3 dwt. and 22 gr.

Lead in the lump, 12 dwt. 1½ gr., but in white lead, in powder, 4 dwt. 8½ gr.

Steel in the lump, 8 dwt. 10 gr., but in prepared powder, (such as is used in medicines,) 2 dwt. 9 gr.

Crystal in the lump, 2 dwt. 18 gr., in powder, 1 dwt. 20 gr.

Red sandal in the lump, 1 dwt. 5½ gr., in powder, 16½ gr.

The wood of the oak in the lump, 19½ gr., in ashes, 1 dwt. 2 gr.

But that the ratios of powder pressed and not pressed may be the better understood, and that according to the difference of the bodies, I have taken the weight of roses in powder, since it could not be taken into the table in the lump: that gave in powder not pressed, 7 gr., in powder pressed, 22 gr., but at the same time in the wood of the tried red sandal, red sandal in powder not pressed, 10 gr., pressed, 16½, so that powder of rose is much lighter than that of sandal if not pressed, heavier if pressed. I have also taken, as a supplement to the former table, the ratios of powder in some examples from flowers, herbs, and seeds, (for the dimension of roots could not be cubic,) for an example of the rest in their own species; and I find that the powder of rose-flower, as aforesaid, gives 22 gr., of sweet marjoram, 23, of sweet fennel, 1 dwt. 3½ gr. I have taken also in powders the weight of other bodies which could not have been taken into the table, as of white sand. This gave 1 dwt. 20 gr.; of common salt, 1 dwt. 10 gr.; of sugar, 1 dwt. 2½ gr.; of myrrh, 1 dwt.; of benjamin, 1 dwt. In this same table you may see that sulphur, in the lump, yields 2 dwt. 2 gr., in chymic oil, 1 dwt. 18 gr.; but vitriol in the body, 1 dwt. 22 gr., in oil, 1 dwt. 21 gr.; wine in the body, 1 dwt. 2 gr., and distilled, 22 gr.; vinegar in the body, 1 dwt. 2 gr., distilled, 1 gr. 1 dwt.

Cautions.

When we speak of weight in the body, and in the powder, we do not understand it of the same individual, but of the body and powder of the same species contained within the same tabular measure.

For if the wood of the oak be taken and at the same time the wood in the individual be reduced to ashes; it both loses a great part of its weight, and the ashes do not by a considerable proportion fill the measure of the wood.

The method of pulverization has considerable influence with respect to the opening or expanding the body. For there is one ratio of powder which is produced by simple bruising or filing, another of that which is produced by distillation, as of sublimate; another of that which is produced by turning it, as it were, into rust by means of aquæ fortes, and consumptions; another of that which is produced through fire, as cinders, calx. When these, therefore, are under consideration, they will not admit in any way of comparison.

It is not my design to dwell longer on each particular subject than is requisite in order to my present undertaking; I cannot, however, refrain from intimating by the way such others as would facilitate it, though not absolutely demanded in this place: especially I would propose that a table should be made of bodies with their pores, with each body with its powders, calcinations, vitrifications, dissolutions, and distillations.

We leave to the proper history of weights the history of the variation of weights in individuals, that is, of the same body in the lump and in powders, as of water in snow or ice, and the same dissolved, of an egg raw and prepared for food, of a fowl alive and dead.

Observations.

In more compact bodies the compactness of the parts is much closer than to admit of being equalled by any position or pressure of its powders. And in proportion to the gravity and solidity of bodies is the difference between the whole bodies and their pores, as the ratio of quicksilver in a state of nature to quicksilver sublimated in powder is fivefold or more; the ratios of steel and lead do not ascend to fourfold; the ratios of crystal and sandal do not ascend to twofold.

In lighter and porous bodies there is perhaps a looser position of the parts in the bodies in their whole state than in their compressed powders, as in dry rose-leaves. And in bodies of this kind there exists a greater difference between their powders pressed and not pressed.

The parts of powders can so sustain themselves that powder not pressed will fill a measure thrice that of powder pressed.

Metallic bodies, as sulphur or vitriol, turned into their oils, retain their weight to a remarkable degree. There is not, indeed, a great difference between the oils and the bodies themselves. Doubtless by distillation they are attenuated and lose in weight: but this is the case with wine in a double degree to what it is with vinegar.

The pore in sublimated powder, as compared with that in the body in its natural state, is

worthy of notice from this circumstance, that although so great, (for it is as I have said five-fold,) and that not in a transient, as in the vapours of quicksilver, but in a consistent body, it returns without difficulty to its former orbit.

Continuation of the History of the Conjunction and Expansion of Matter through Space in the same Body.

Animals in swimming depress the water with their hands or feet; that being depressed, rises above its natural consistency, and bears up the body rising upon it. But skilful swimmers can so balance themselves upon the water, as to keep themselves up for a time without moving their arms or legs; nay, to walk upright and on the water, and perform other feats of agility.

Waterfowls, indeed, are webfooted, and so can conveniently depress the water with the membranes of their feet; but can swim better in deep water.

Birds in flying beat and condense the air with their wings, but the air, (as was said of water,) restoring itself to its own consistency, carries the bird. And birds also sometimes cut their path with expanded wings, but retained in one position, or now and then striking their wings a little and then returning to their gliding motion. And there is an analogy between winged animals, whether feathered or not. For flies and all creatures of that kind have their membranes of wings with which they beat the air. But the weakness of their wings is made up by the lightness of their bodies. Winged creatures are more easily borne up aloft, especially those which have broader wings, as the swallow, though their motion is not so swift. And all birds which are of considerable magnitude have more difficulty in the first stage of their flight, in elevating themselves from the earth, since the air is of course not so deep.

Caution.

The motion of condensation in water, or air, or the like, is manifestly through striking or moving upon it. The parts of air or water, the farther they are from the first stroke or impulse, the weaker they are struck, and the slower they give way; but as they are nearer, so much the more forcibly and quickly; whence it necessarily happens that the anterior air, which flies with more rapidity, comes up to the posterior air, which is slower in its course, and so they come together. But since a greater condensation than is natural results from their conjunction, the bodies of water or air leap back and return, in order to open and loose themselves.

History.

The face of water and of every fluid is uneven after agitation and perturbation, and that by an inequality movable and successive, till the water regains its proper consistency and is freed from the pressure: as in the waves of the sea and of rivers, even after the winds have calmed, and in all disturbed water.

The same kind of inequality is evidently in the winds also, which roll themselves together in the same manner as the waves: neither do they return to tranquillity immediately on the cessation of the first impetus, except that in the undulation of the air, the motion of gravity, which in water is joined with the motion of liberation from pressure, does not intervene.

A stone thrown sidelong on the water (as boys do in play) leaps off and repeatedly falls, and is struck again by the water. Swimmers when from an eminence they leap headlong into the water, guard against dividing it through the joining of their thighs. Lastly, water struck by the hand or by the body with power, beats like a ferula or any rather hard body, and causes pain. And in skiffs and keels of vessels which are guided by the force of oars, the water pushed forward and borne down by the oars behind the rowers forces the skiff forward, and makes it move on its way, and bound onward, as a boat is moved off from the shore by the waterman's pole. For the water, gathering itself behind the stern of the vessel and urging it into a contrary direction, is not the principal cause of this, which nevertheless arises from the pressure relaxing itself.

Air, in avoiding compression, imitates and puts forth all the actions of a solid body; as we may see in the winds, which direct the courses of ships, overthrow houses and trees, and prostrate them to the ground.

The stroke that is given from a sling, hollow and long, so as to help the compression of the air, is owing to the same cause.

Boys in imitation of cannon scoop out the wood of the alder tree and stop up each end of a squirt with bits of the root of the fleur de luce, or of paper rolled up, and then shoot off the little ball by means of a wooden pin, but before that touches it, the further ball is sent off with an audible force by the power of the air shut up in the squirt.

Air forcibly condensed becomes colder and seems to approach nearer the nature of water, as when we raise the wind with a fan, we perceive the air with a hurried motion by pressing forward, beating back again, or as when by drawing our lips together, the breath becomes cold, or as may be seen in bellows.

And when in the open air, you will find that it is much cooler when the wind is blowing than when the air is perfectly calm.

In the generation of sounds air condensed imitates the nature of a solid body, for, as between two solid bodies sound is produced by percussion,

so a sound is produced between a solid body and air condensed, and again between two opposite bodies of condensed air. For, with respect to the chords in musical instruments, it is plain that the sound is not emitted by touch, or by the percussion between the finger or the bow, but between the chord and the air.

For a chord when it rebounds, and that with celerity from its being stretched, first condenses the air, and then strikes it. Instruments also put into sound by the breath, on account of the very weak motion of the breath compared with that of a stringed instrument, are of necessity made hollow to assist the compression of the air, which is also considered an assistance in stringed instruments.

Water pent up makes a way for itself with a powerful impetus, and diffuses itself on all sides, in order to obtain its natural latitude, as under the arches of bridges. In the same manner also wind narrowed and condensed bursts forth with violence. Whirlpools produce whirlpools, for, since the natural relaxation is impeded, each part sustains an equal pressure.

Water emitted on a sudden with force from a confined space, reflects the resemblance of a continuous body, as of a thread or rod, or branch of a tree, and becomes straight, afterward bends, then divides itself, and disperses itself into a circle into drops, as in little pipes, or syringes, and gutters.

There is a kind of pool not uncommon in ponds, especially after hay has been mown, or rather seen from that circumstance. The hurricane sometimes raises a quantity of hay in the air, and carries it along for a time together and not scattered, until, after it has been borne to a considerable height, the hay disperses itself and forms, as it were, a canopy.

A wooden platter, empty and turned downwards, and placed evenly on the surface of the water, and afterward put under the water, bears with it down to the bottom of the vessel the air before contained in the platter; but if, with the like equilibrium, it be again taken out of the water, you will find the air to have conveyed itself into not much less space than it before filled. This will appear from the colouring of the lip of the platter at the place whither the water had ascended, and from which the air received itself within.

In a bed-room, if a window be left open when the wind blows, if there be no other vent, it is not very much felt, (unless it be violent,) since it is not received by the body of wind which had filled the room, and was somewhat condensed by the first gentle wind, and afterwards does not admit of condensation; but as soon as a vent is given, it is then manifestly perceived.

For the more comfortable continuance of workmen under water, it has been thought that a large hollow vessel might be constructed of metal, or of some other kind of material, to be let down to the bottom of the water; that it might be sustained by a tripod, with the feet affixed to the brim of the vessel, and the feet to be a little less than the human stature. The vessel was let down into a great depth, with all the air it contained, in the same manner as was described in the case of the platter, and was set upon its feet, and stood just by the spot where the work was to be carried on. But the divers, who were the workmen, when they wanted respiration put their heads into the hollow of the vessel, and having taken a supply of air, returned to their work. And I myself in a bath made my servant put his head into a basin under the water depressed with air, and he so remained for half the quarter of an hour, until he felt that the air, warmed by his breath, brought on a feeling of suffocation.

To try by the bladder whether air readily admits of some small contraction, would be a fallacious experiment. For when the bladder is filled with wind, the air is condensed by the wind itself, so that the air within the bladder is more dense than common air, and therefore may be expected to be less adapted to a new condensation. But in the usual experiment of the wooden plate forced down beneath the water, you may see that the water, entering from the extreme part of the vessel, has occupied some space, and that the air has occasioned a defalcation of the same space.

But in order more clearly to illustrate the proportion, I placed a small globular, or other solid body, and that would sink, at the bottom of the vessel, above which the plate was to be placed; then I placed above that another plate, metallic and not wooden, that could stand of itself at the bottom of the vessel. But if that body be small in size, when it is received into the hollow of the plate, it forces the air together, and does not expel it; but if of greater magnitude than to admit of the easy yielding of the air, the air, impatient of this greater pressure, somewhat lifts up the plate, and ascends in bubbles.

And I had a hollow leaden globe made, the sides of it sufficiently firm to bear the force of a mallet or of a press: and this globe, being struck at either pole with mallets, approached nearer and nearer to a planisphere. And it yielded more readily under the first contusions, afterward less so, according to the measure of the condensation; so that at the last the mallets were of but little service, and there was need of pressing, and that with some violence. But I enjoined, that, after the pressing, a few days should be suffered to elapse, but this has no relation to our present design, but looks another way.

Air, by a powerful exsuction into closed vessels, is extended or dilated, so that part of the air being removed, the remainder, nevertheless, fills the same measure as the whole had filled; and yet

so as to endeavour, as much as possible, to restore itself and to get rid of that extension. You may perceive this in eggs, which contain scented water, and are broken in play, so that they imbue the air with their scent. The way to try it is to let all the food that is in the egg be drained, then let a person confine, by a powerful exsuction, the air itself which has found its way in, and immediately on exsuction bore a hole with the finger, place the egg thus closed under the water, and then take away your finger. But the air, turned aside by this tension, and endeavouring to recover its place, draws the water, and enters till that portion of air regains its former consistency.

I have tried the same experiment with a glass (or philosopher's) egg, and find that the water received is about an eighth part of the capacity; so much was the air extended by exsuction. But this depends upon the greater or less violence of the exsuction. But toward the end of the exsuction, it drew with it the brim of the vessel itself. I moreover made use of a new experiment, namely, after exsuction to stop up the hole with wax, and let the egg remain so sealed up for a whole day. I did this to try whether that day would lessen the inclination of the air, as is the case in consistent bodies, in twigs, bars of iron, and the like, the motions of which, to recover themselves from tension, become feebler through delay; but I find that the effect remains in this instance the same; the egg continues to draw, and with the same force, the same quantity of water as if it had been forthwith put in after exsuction: so that when the hole was opened out of the water, it drew in new air with an audible sound, but the effect of further delay I did not try.

If bellows are suddenly raised and opened, and no breathing place is given, they break; for since so great a quantity of air, as can fill the inside, rising suddenly from a level to a height, cannot be drawn through the narrow strait of the beak of the bellows, and the air which is already within it cannot be extended over such a space, the bellows must break.

History.

If water be in a just quantity put into a glass, and the water's ascent be marked, and a common cinder cleaned through a sieve be put into the water and settle in it, you will see the space occupied by the cinder at the bottom ascend higher by one-fourth than the body of water had ascended on the surface from the place before marked; and hence it is plain, that the water mixed with the cinder either changes its orbit and contracts itself, or that it receives the cinder within the hollow part of the water, since it by no means expands itself in proportion to the cinder received. But if you try this in the very lightest and thinnest sand, (but not calcined or reduced by fire,) you will find that the water rises at the surface according as the sand does at the bottom. I think also that many infusions load the water, and that it cannot extend according to the bulk of the body received; but I pass by the experiment on this subject.

Caution.

I do not confound the motion of succession, which is called motion, to avoid the supposition of a vacuum, with the motion of reception from extension. For these two motions are in time and effect conjoined, but differ in their proportion to each other, as will appear in the proper history of the motion of succession.

Air received through breathing becomes in a little while vapour, so as to cover a lookingglass with a kind of steam, or in winter time so as to be congealed about the beard. But that dew, as it were, upon the bright blade of a sword, or upon a diamond, vanishes like a little cloud, so that the polished body seems to purify itself.

The mode of the process of water in the expansion and contraction which take place in the body of it through the medium of fire, is thus. Water acted upon by moderate heat emits a little and clear vapour, before any other change is seen within the body of it; the heat then continuing and increasing, the body yet remaining whole, it does not rise nor foam, as it were, in small bubbles, but, ascending through greater ones, dissolves itself into copious vapour, but the water soon flies off, and is consumed. And that vapour, if it is not impeded, mingles with the air, being at first visible, and even after it has vanished from sight, perceptible, either by sending forth a scent, or by moistening and softening the air at the touch or at breathing. And at length it hides itself, and is lost in that sea of air. But if first a solid body meet it, (and so much the more if it be equal to it and polished,) the vapour gently enters into itself, and is returned into the water either by the exclusion or ejection of the air, which was before mixed with the vapour. And that whole process is manifest, as well in the decoction of water as in distillation. But we moreover see vapours which are emitted from the earth, if they have not been thoroughly subdued and scattered by the heat of the sun, nor from the coldness of the air equally commingled with that body of air, although they do not meet a solid body, yet returned into water from the very cold and destitution of heat, so that in evening dew it takes place earlier, in showers later. I have, therefore, upon patient and diligent inquiry set down that the expansion of air, if it be compared with water, amounts to a ratio of one hundred and twentyfold or thereabout.

History of the Extension of Matter in Pneumatics

I have taken a glass phial which could perhaps hold one ounce; I made choice of so small a

vessel as for two reasons particularly suited to the experiment, first, that it might sooner bring on the boiling with less heat, lest the bladder, which was to be put above the phial, should be burned and dried up by an intenser heat: secondly, that it might receive a less portion of air in that part which was not to be filled with water: since I was aware that the air itself received extension through fire. I determined, therefore, of making use of but a little air, that that extension might not disturb the ratios of the water. The phial was not straight-necked, without any lip, (for, then, the vapour of the water would distil more rapidly, and the dew would glide down that part of the bladder, which was joined to the neck of the phial,) but with the neck at first straightened a little, and then returned as it were with the lip. This vessel I half filled with water, (supposing that this would hasten the boiling,) and took the weight of the water with the phial itself by sand put in the scale of a balance. Then I took the bladder, which might contain about half a pint, taking care that it should be neither old nor dry, and given to resist more from dryness, but new and rather soft. I, then, tried the soundness of the bladder by blowing, to be certain that there were no holes in it, and then emptied all the air out of it as much as possible. I also first of all applied oil to the outside of the bladder, and made it take the oil by rubbing it in. This I did to make the bladder closer, and to stop up the pores (if there might chance to be any) with the oil. I fastened the bladder securely about the mouth of the phial, the mouth of the phial being received into the mouth of the bladder; this was done with a string waxed a little, that might adhere better and tie more closely. But this is made better by clay made out of meal and the white of an egg, and bound with black paper and well dried, as I myself have found. At last I placed the phial over burning coals on a little hearth. The water soon after began to boil, and by degrees to inflate every part of the bladder, till it seemed as though it would break. I immediately removed the glass from the fire and placed it upon the carpet, lest the glass should be broken by the cold, and instantly I made a little hole at the top of the bladder with a needle, lest, on the vapour being restored to water at the ceasing of the heat, should fall back and confound the ratios. But afterward I took away the bladder itself with the string, and cleared it from the clay, if any had been used, and then weighed the remaining water with the phials again. And I found that about the weight of two pennyweights had been consumed. And I saw that whatever of the body had filled the bladder when it was full of wind, was made and produced from that which had been lost from the water. The matter, therefore, when it was contracted in the body of the water, filled as much space as two pennyweights of the body of water filled: but the same matter expanded in a body of vapour filled half a pint. I, therefore, set down the ratios according to the dimension expressed in the table: a vapour of water can bear a ratio of eightyfold to a body of water. The bladder filled with wind in the manner I have mentioned, if no breathing-place be given, but it be removed whole from the fire, immediately decreases from the inflation, and subsides and is contracted. The vapour whilst the bladder swells, being emitted from the hole, had another kind of vapour distinct from the common one of water, more thin, clear, and upright, and not so soon mingling itself with the air.

Cautions.

We must not suppose that if there were a greater consumption of water, a greater bladder could be filled in proportion. I tried this and found that it would not answer, but the inflation that follows upon it does not take place gradually, but altogether. This I attribute partly to the inflaming of the bladder, which was made harder and would not yield so easily, and was perhaps more porous; (but this might be corrected by a moist heat as by the *balneum Mariæ*;) but still more to this, that the vapour being increased through the constant succession, inclines to recover itself and condenses itself. The vapour, therefore, which is received into the bladder is not to be compared to those which are received into stoves, because these latter mutually following and urging each other, thicken, but those expand themselves at will from the soft and yielding nature of the bladder, especially at the beginning, (as I said,) before the copiousness of the vapour brings on its recovery.

The expansion of the vapour of water is not to be judged entirely from the appearance of the vapour which flies off into the air; for that vapour being immediately mixed with the air, borrows by far the greatest dimensions of its mixed body from the air, and does not remain in its own size. And so it is amplified to the bulk of the air into which it is received, as a little red wine or any other coloured fluid which imparts a colour to a great quantity of water. The exact ratios in so minute a case cannot be obtained without laborious and unprofitable research, and are very slightly connected with our present design. It is enough that from this experiment it is plain that the ratio of vapour to water is not twofold, nor tenfold, nor fortyfold, nor again a thousandfold, two hundredfold, &c. For the limits, not degrees of natures, are the subjects of our investigation. If, therefore, any one, by any accident or slight variation in the mode of his experiment, whether from the shape of the glass he makes use of, or the hardness or softness of the bladder, or the degree of heat, does not fall upon the ratio of eightyfold, the

consequence is immaterial. For I suppose that there are none so ignorant as to imagine that pneumatic and volatile vapours, which fly off from heavy bodies, lie hid in the pores of the same bodies, and are not of the same matter with the ponderous body, but are separated from the ponderous part, when the water is, as it were, entirely consumed, and evaporates into nothing. A live coal, if placed in the scale of a balance and left till it becomes a cinder, will be found to be much lighter. Metals themselves are changed in a wonderful degree in weight by the evolutions of their smoke. The same matter, therefore, is tangible and has weight, and is yet pneumatic, and can be divested of weight.

History.

The mode of the process of oil is this. If oil be poured into a common glass phial and placed upon the fire, it will boil much more slowly, and will require a greater heat than water. And at first some drops and small grains appear scattered through the body of the oil, ascending with a creaking sound: the bubbles in the mean time do not play on the surface, as is the case with water, nor does the body rise whole, and in general no steam flies off, but a little afterward the whole body is inflated and dilated in a remarkable proportion, as if rising in a twofold degree. Then, indeed, a very copious and dense steam arises: if a fire be applied to the steam, even a good way above the mouth of the phial, the steam forthwith produces a flame, and descends immediately to the mouth of the phial, and there fixes itself and continues burning. But if the oil is heated to a greater degree, the steam burning to the last, out of the phial, without any flame or ignited body being applied, completely inflames itself, and takes the expansion of the flame.

Caution.

See that the mouth of the phial is rather narrow, that the phial may confine the fumes, lest by their largely and immediately mixing with the air, they lose their inflammable nature.

History.

The method of process of spirit of wine is this: it is excited by much less heat, and brings itself to expand sooner and more than water. It boils up with great bubbles without froth, and even with the raising of its whole body, but the vapour, whilst it is collected, will on the application of fire produce fire, at a good distance from the mouth of the glass, not so bright (but at least as compact) as oil, but thin and scant of a blue colour, and almost transparent. But being inflamed, it is borne to the mouth of the glass, where is a supply of more copious fuel, as it is also with oil. But if the vapour is inflamed in the part verging a little obliquely from the mouth of the phial, the inflammation becomes pensile in the air, undulating or winding after the appearance of vapour, and would doubtless attend it longer if the vapour remained together and did not confound itself with the air. And the body itself of spirit of wine, if no remarkable vapour goes before, the fire being applied to it and kept to it a little while is changed into the flame, and it expands with so much the greater ease and swiftness, as the spirit is more widely diffused and occupies a less altitude. But if the spirit of wine is put in the hollow of the palm of the hand, and a lighted candle between the fingers is placed near the palm of the hand, (as boys are wont to play with powder of resin,) and the spirit is gently moved forward, and straight forward, not upward; the body itself burns in the air, and when burning sometimes descends in a right direction, sometimes unfolds a little cloud flying in the air, which nevertheless verges itself to descent; sometimes when set on fire it cleaves burning, to the roof or sides, or floor of the room, and gradually becomes extinct.

Vinegar, verjuice, wine, milk, and other simple liquors (I speak of vegetable and animal substances, for of minerals I will treat by themselves) have their modes of expansion, and some remarkable differences attending them, which it would be out of place here to enumerate: but they are in those natures which we have remarked in the processes of water, oil, and spirit of wine; namely, in the degree of heat; and mode of expansion, which is threefold, either in the whole body or in froth, or in rather large bubbles; for fat bodies, of unripe juice, as generally ascend in greater bubbles, of dried sap, as vinegar, in less. A collection of spirit moreover differs in its site. For in the boiling of wine, the bubbles begin to collect themselves about the middle, in vinegar about the sides: and it is the same in ripe and strong wine, and again in vapid or stale, when they are infused. But all liquors, even oil itself, before they begin to boil, cast up a few and thin half bubbles about the sides of the vessel. And all liquors boil and are consumed quicker in a small than in a great quantity.

Caution.

I consider that compounded liquors are not proper to the history of the expansion and union of matter through the medium of fire, because they disturb and confuse the ratios of simple expansion and coition by their separations and mixtures. I leave them, therefore, for the proper history of the separation and mixture of matter.

History

Spirit of wine, put in an experiment with that elastic cap, (which I described when speaking of water,) obtains this sort of expansion. I find

that a weight of six pennyweights, consumed and dissolved into vapour, filled and fully inflated a great bladder which could contain eight pints; which bladder was greater by sixteen times than that which I used in the case of water, which received only half a pint. But, in the experiment of the water, there was a consumption of the weight of only two pennyweights, which is only the third part of six pennyweights. The ratios being thus calculated, the expansion of the vapour of spirit of wine bears a fivefold ratio and more, to the expansion of the vapour of water. And that very great expansion did not keep the body, on the removal of the vessel from the fire, from hastening to recover itself, the bladder forthwith becoming red and remarkably contracted. And, from this experiment, I began to estimate the expansion of the body of flame on probable, though not indisputable conjecture. For, since the vapour of spirit of wine is so inflammable, and approaches so near the nature of fire, I considered that the ratios of spirit of wine, compared with fire, agreed with the ratios of the vapour of water compared with air. For, we may suppose that the ratios of perfect and fixed bodies (as of air and fire) are in harmony with those of the elements, or imperfect and moving bodies, (as of vapours.) And it will follow from this, that fire exceeds air by five degrees, in the rarity or expansion of matter. For such is the excess of their respective vapours, as was before said. For, the fire itself may bear the ratio of one and a half to the proper vapour, not the impure, but the highly prepared vapour; as I have laid it down, also that air can have the same ratio to the vapour of water highly prepared. And these experiments do not disagree materially with what we may frequently observe. For, if you blow out a lighted wax candle, and mark the dimension of the smoky thread which ascends, (in the lowest part before it is dispersed,) and place the candle near the fire, and again look at that portion of the fire which first reaches it, you will not imagine that it exceeds more than double the magnitude of the smoke. If you mark with accuracy the dimension of gunpowder, or, for greater certainty, measure it in a little box, and again take the dimension of its flame, after it has been lit, you will readily grant that the flame exceeds the body, as far as it can be told at first sight, a thousand degrees. And, from what has been before laid down, there should be a considerable proportion of fire according to the nitre. But this I will explain more perfectly in my observations upon this history. We very clearly see that air itself is expanded and contracted from heat and cold in those bodies of wind which physicians use for attraction. For, these warmed over the fire, and then applied immediately to the body, draw the skin, the air contracting itself and gradually recovering itself. And this it does of itself, although the hemp may not have been put on and heated, which is used to produce a more powerful attraction. Moreover, if a cold sponge be applied outside over the blister, the air contracts itself so much the more by virtue of the cold, and the attraction becomes more determined.

I have put a silver saltcellar of the usual belltower form, in a bath or goblet filled with water, bearing the air depressed with itself to the bottom of the vessel. I then put two or three live coals in the little hollow space in which the salt is placed when applied to its ordinary use, and raised a flame by blowing. Very soon after, the air, rarefied by the heat, and impatient of its former orbit, lifted up the bottom of the saltcellar on one side, and ascended in bubbles. Hero describes an altar so constructed as that, if you laid a holocaust upon it and set it on fire, suddenly water would fall to extinguish the fire. This might be accomplished by air being received under the altar in a hollow space closed up, and with no other way of exit, (when the air was extended by the fire,) but where it might force out the water prepared for this purpose in the channel. There were lately in this country some Hollanders who had invented a musical instrument, which, on being struck by the rays of the sun, gave out a certain harmony. This was very probably owing to the extension of the heated air, which could produce the motion of the instrument, since it is certain that air acted upon by the contact of the very slightest heat, immediately begets expansion.

But, in order to come at a more accurate knowledge of the expansion of the air let into that elastic bladder, I took an empty glass, (I mean, filled only with air,) and placed upon the bladder, the cap of which I before treated. But when the phial was placed over the fire, the air extended itself more quickly and with less heat than water or spirit of wine, but with not a very ample expansion. For it bore this proportion. If the bladder held less by six ounces than the phial itself, the air completely filled and inflated it; it did not ascend easily on greater expansion; and no visible body proceeded out of it, after making a little hole in the top of the bladder, until it was inflated. A. T. R.

DESCRIPTION

OF THE

INTELLECTUAL GLOBE.

CHAPTER I.

Division general of Human Learning into History, Poesy, Philosophy, according to the three Faculties of the Mind, Memory, Imagination, Reason; showing that the same Division holds also in Matters Theological; since the Vessel, namely, Human Intellect, is the same, though the Matter contained, and the Mode of its Entrance, be different.

We adopt that division of human learning which is correlative to the three faculties of the intellect. We therefore set down its parts as three, History, Poesy, Philosophy:—history has reference to memory, poesy to imagination, philosophy to reason. By poesy in this place, we mean nothing else but feigned history. History is, properly, the history of individual facts, the impressions of which are the earliest and most ancient guests of the human mind, and as it were the primitive matter of the sciences. To deal with these individuals and that matter forms the mind's habitual employment, and occasionally, its amusement. For all science is the labour and handicraft of the mind; poetry can only be considered its recreation. In philosophy the mind is enslaved to things, in poesy it is let loose from the bondage of things, and breaks forth illimitably, and creates at will. And any one may easily comprehend that this is so, who shall seek the source of things intellectual even on the simplest principles, and with the most crass apprehension. For the images of things individual are admitted into the sense and fixed in the memory. They pass into the memory, as it were, whole, in the same manner as they present themselves. These the mind recals and retraces; and, which is its proper business, puts together and decomposes their parts. Now, individuals severally have something in common one with another, and again something diverse and complex. Composition and division takes place either at the will of the mind itself, or agreeably to what is found in nature. If it is done at the mere volition of the mind, and such parts of things are arbitrarily applied, so as to form a certain likeness of some individual, it is the work of imagination; which, restrained by no law or necessity of nature or of matter, can unite things which in nature are most discordant, and divide those which never exist in separation, so as however this is still confined to such original parts of the individuals. For there is no imagination, not even a dream, of objects which have not in some shape presented themselves to the senses. Again, if the same sections of objects be joined or divided according to the real evidence of things, and as they actually present themselves in nature, or at least as they are observed to present themselves according to the general apprehension of mankind, this is the office of reason; and all such adjustment is ascribed to reason.

Whence it clearly appears that from these three sources there arise the three several streams of history, poesy, and philosophy, and that there cannot be other or more branches than these. For under the name of philosophy we comprehend all the arts and sciences, and whatever in short can, from the presentment of the several objects of nature, be by the mind collected and arranged into general notions. Nor do we think that there is occasion, in consideration of the extent of the subject, for any other division of learning than that which we have stated above. For though the responses of a divine oracle and of the senses are different, no doubt, both in the matter and the mode by which it finds access to the mind; yet the spirit of man which receives both is one and the same, just as different liquors passing through differents apertures are received into one and the same vessel. Wherefore we assert that history itself either consists of sacred history, or of divine precepts and doctrines, which are, so to speak, an everyday philosophy. And that part which seems to fall without this division, prophecy, is itself a species of history, with the prerogative of deity stamped upon it of making all times one duration, so that the narrative may anticipate the fact; thus also the mode of promulgating vaticination, by vision, or the heavenly doctrines by parables, partakes of the nature of poetry

CHAPTER II.

A partition of History into Natural and Civil, Ecclesiastical, Literary, and Particular, included in Civil History. A division of Natural History into the History of Generations, Præter-generations, and Arts; according to the three states of Nature, namely, Nature in course, varying, and constrained.

History is either natural or civil. In natural history we recount the events and doings of nature; in civil, of men. Things divine no doubt have a conspicuous share in both, but chiefly in human, so as to constitute a branch of their own in history, which we are accustomed to call sacred or ecclesiastical. We shall therefore assign that branch to the province of civil history: and we shall first speak of natural history. There is extant no natural history of things individual. Not that we would lay down the false position that history ought to be engrossed with describing individuals, which are limited in time and place. For in that view it is proper there should be none; since, however, there is a general resemblance of natural objects, so that if you know one you know all, it were superfluous and interminable to speak of individuals. Thus, if in any case that indistinguishable general resemblance be wanting, natural history admits individuals those, that is, of which there is not a number or family. For a history of the sun, the moon, the earth, and the like, which are unique in their species, is most properly written, and no less of those which conspicuously vary from their species and are monstrous; since the description and the knowledge of the species neither sufficiently nor competently supplies the want of it. Wherefore natural history does not exclude these two classes of individuals, but is in by far the largest part of it, as we have already stated, employed about species. But we attempt a partition of natural history, derived from the tendency and condition of nature herself, which is found placed in three several states, and subject as it were, to three modes of government. For nature is either free, spontaneously diffusing and developing itself in its wonted course, that is, when nature depends upon itself, in no way obstructed and subdued, as in the heavens, animals, plants, and all the natural productions; or, again, it is evidently torn down and precipitated from its proper state by the pravity and erratic tendency of obdurate and resisting matter, or by violence of obstacles, as is the case in the care of monsters and unnatural productions; or, finally, it is coerced by the art and industry of man, fashioned, altered, and as it were made anew, as in things artificial. For in things artificial nature seems, as it were, new made, and there is seen a new face of things, or second universe. Wherefore natural history of either the liberty of nature or its errors into bonds. Now, if it be unpleasing to any one that the arts should be called the bonds of nature, since they are rather to be considered its deliverers and champions, since they make nature, in some instances, mistress of her object, by reducing obstacles into her order. We regard little such delicacies and elegancies of language. We only mean to signify this, that nature, by means of arts, is placed by compulsion under a necessity of doing that which without arts would not have been done, whether that be denominated force and bonds, or assistance, and consummating skill. We shall therefore divide natural history into the history of generations, the history of preter-generations, and the history of arts, which we are accustomed to call mechanical and experimental history. And we willingly place the history of arts among the species of natural history, because there has obtained a now inveterate mode of speaking and notion, as if art were something different from nature, so that things artificial ought to be discriminated from things natural, as if wholly and generically different; whence arises this evil, that most writers of natural history think they have accomplished their task if they have achieved a history of animals, plants, or minerals, omitting the experiments of mechanics, which are of by far the greatest consequence to philosophy; and there has insinuated itself into mens' minds a still subtler error, namely, this, that art is conceived to be a sort of addition to nature, the proper effect of which is to perfect what nature has begun, or to correct her where she has deviated; but by no means to work radical changes in her, and shake her at the roots, which has been a source of great despondency in the attempts of men. Whereas, on the contrary, that ought to be sunk deep that things artificial do not differ from natural in form or essence but in efficients only; that in reality man has no power over nature, except that of motion, namely, to apply or to remove natural bodies; but nature performs all the rest within herself. Wherefore, when there is granted a proper application or removal of natural bodies, men and art can do all; when not granted, nothing. Again, provided that due admission and removal takes place in order to some effect, it matters not whether it be done by man or by art, or by nature without man. Nor is the one more potent than the other; so, if any one by sprinkling water create the apparition of a rainbow upon a wall, he does not find nature less obedient than when the same takes place in the air on humid clouds. Again, when gold is found pure in veins, where nature has performed exactly the same office to herself, as if pure gold was extracted by means of the smelting pot and ministry of man. Sometimes, too, a ministry of this kind

is, by the laws of the universe, committed to other animals. For honey is not the less an artificial production, which is produced through the medium of the industry of the bee, than sugar which is produced by that of man; and in manna, which is a similar composition, nature is content with her own chymistry. Since, then, nature is one and the same thing, and its power all-pervading and never at war with itself, these three things ought to be understood as equally subordinate only to nature; the course of nature, the eccentricity of nature, and art or man added to the universe, and therefore it is fitting that all these things should be interwoven in one continuous series of narrations, which Caius Pliny in a great manner attempted, who embraced natural history with a comprehensiveness of plan suitable to its dignity, but having embraced it, treated it most meagerly. Let this, then, be the first division of natural history.

CHAPTER III.

A Partition of Natural History according to its Use and End, showing that by far the noblest End of Natural History is its Ministration in the first Instance to found Philosophy; and that such a History—a History modelled in Order to such End, is wanted.

But Natural History, threefold in its subject, (as we have stated,) is twofold in its use. For it is employed either for the purpose of furnishing knowledge of those facts which are recorded by the history, or as the primitive matter of philosophy. But, if the noblest end of natural history is this, that it is, so to speak, the stuff and *Hyle* of a just and legitimate induction, and draws enough from the sense to instruct the intellect. For that other sort of history, which either delights by the charm of the narration, or pleases by its subserviency to immediate experiments, and which is in request either in respect of such pleasure or such profit, is of a cast inferior, and in its nature meaner, in comparison with that of which it is the nature and the quality to serve as an appropriate preparation to found philosophy. For that is the true natural history which is established as an immovable and eternal foundation for true and practical philosophy; which affords the first genial kindling to the pure light of nature, wherein all phantasms vanish; and of which the genius, neglected and unappeased by fit offerings, has, in an evil hour, sent among us those legions of spectres and worlds of shadows, which we see hovering over all the expanse of the philosophies, along with great and lamentable dearth of useful works. Now, we assert and explicitly testify, that a natural history, such as it ought to be in order to this end, is not possessed, but ought to be placed among histories wanting. And let not either the great names of the ancients, or the great tomes of the moderns, startle the mental vision of any one; and let him not think that our complaint is the less just. We are well aware that there is extant a natural history, voluminous in its bulk, entertaining from its variety, often interesting, elaborate even to scrupulosity. But if one shall extract from it accounts derived from fable and antiquity, the quotations and testimonies of authors, the empty questions and controversies, and, finally, that part of it which is mere words and rhetorical ornament, (which is better adapted to disquisition and the talk of literary nights than to establish philosophy,) this great appearance of substance subsides to nothing. Thus there seems to have been desiderated and collected by some men, in this instance, rather a Thesaurus for the allusions of eloquence, than a solid and authentic narrative of facts. Besides, it seems to no great purpose to recount or know the wonderful varieties of flowers of the iris or the tulip, of shells, or dogs, or hawks. For these are nothing but the sport or wantonness of nature, and approach nearly the nature of individuals. By which means men acquire exquisite minuteness of knowledge in the objects, but meager and even useless information as respects the purposes, of science. Yet, these are the things of which the common natural history makes such an ostentatious display. Now, though natural history has, on the one hand, degenerated into foreign, and, on the other, indulged in superfluous inquiries, yet assuredly great and valuable parts of it have either been entirely passed over, or carelessly and lightly handled. And in the whole scope of its investigations and its accumulations, it is not by any means found adapted and qualified to attain the end of which we speak, namely, to found philosophy. This will appear best in its particular branches, and by a comparison of that history, whose descriptions we shall presently submit to the eyes of man, with that which now obtains.

CHAPTER IV.

The Treatise begins by stating what the History wanted ought to be; namely, a Natural History, as a Foundation for Philosophy. To unfold this more clearly, there is first exhibited a Scheme of the History of Generations. Of this the Parts are set down as five: The first, the History of the Heavenly Bodies; the second, of Meteors; the third, of Earth and Sea; the fourth, of the greater Colleges of Things, that is, of Elements or Masses; the fifth, of the smaller Colleges or Species. The History of primitive Virtues is reserved, till the exposition of the first Division, namely, of Generations, Preter-generations, and Arts, is completed

As we think it concerns our honour not to leave to others the execution of the history which we

desire, but to impose it as a task upon ourselves, since in proportion as the subject may seem open to the labour of all, in the same proportion, there is greater risk of their deviating from the design, and we have therefore distinguished it as forming the third part of our history; yet faithfully observe our purpose of explaining and exhibiting what hath been neglected, and place some part of science in security, should we be cut off by any of the accidents of humanity; we have thought it good to add now and in this place, our sentiments and counsels respecting this subject. We set down of the history of generations, or nature at large, five divisions. These are the history of the ether, the history of the meteors and of the regions of the air, as they are called; for the lower track circumambient to the earth's surface, and to the bodies which are placed in it, we refer to the history of meteors. Thirdly, there follows the history of the earth and sea, which conjointly compose one globe. And so far nature is divided according to place, and the things occupying those places. The other two parts discriminate substances, or rather masses of substances. For homogeneous substances are usually collected in larger or smaller masses, which we have been wont to name larger and smaller colleges of things, and they have the same relation as in human polity a tribe and family. Therefore, we place the fourth in order, the history of the elements or larger colleges; fifthly and lastly, the history of species or smaller colleges. We mean elements to be taken in this sense, not that they should be understood as the principles of things, but as larger masses of connatural substances. That larger size happens by reason of the manageable, simple, obvious, and perfected texture of the matter; whereas, species are furnished by nature sparingly, because of the dissimilarity, and, in most instances, the organic structure of the texture. Now of the history of those properties which may be regarded as the cardinal and catholic virtues of nature, density, rarity, levity, gravity, heat, cold, consistency, fluidity, similarity, dissimilarity, specific, organic, and the like, along with the motions contributing to them, as of antitype, connexion, coition, expansion, and the rest of such properties and motions, (the history of which we would have collected and complete before we come to the point, where the intellect is to work upon them,) and of the mode of preparing that history; we shall discourse after finishing the explanation of the three divisions, generation, præter-generation, and arts. For we have not comprehended that among the three divisions, since it is not properly a history, but something between history and philosophy, a sort of middle term. At present we shall speak and give our counsels respecting the history of the heavenly bodies, and then of the others.

CHAPTER V.

Resumes the consideration of the History of the Heavenly Bodies, showing what it ought to be in kind, and that the legitimate ordering of the History ought to turn upon three kinds of Precepts, namely, concerning the End of such History, the Matter, and Mode of conducting it.

We would have the history of the celestial bodies simple, not vitiated by arbitrary dogmas, but, as it were, suspended out of the reach of the forcible grappling and presumption of theories, only embracing phenomena raw and detached, which had grown up, so to speak, blended with such dogmas; finally, such a history as may set forth narratives of facts exactly in the same manner as if nothing had been fixed by the arts of astronomy and astrology, but only as if experiments and observations had been diligently collected and perspicuously described. In which kind of history we find nothing hitherto done to accord with our wish. Caius Pliny attempted only something of the kind in a cursory and inexact style; but a valuable history might be extracted and dug from the mine of Ptolemy and Copernicus, and the more informed teachers of astronomy, by exhausting all the experiments, and adding the observations of the moderns. And if it should appear to any one surprising, that we should throw back again what had been secured, enlarged, and rectified, to its primitive barbarism, and the simplicity of its crude observations, we answer thus; with none of the ostentation of the earlier inventors, we attempt a far nobler work, for we think not of calculations and predictions, but of philosophy—such, we mean, as shall instruct the human mind, not only with respect to the motion of the higher bodies and its periods, but concerning their substance, their various qualities, their power and influence, according to methods natural and admitting of no uncertainty, free from the superstition and childishness of tradition; and, again, as respects their motion itself, to discover and unfold not what is reconcilable to known phenomena, but what is found on penetrating deep into nature, and is true in act and in reality. And any one may easily observe both that those who have supposed that the earth revolves on its axis, and those, on the other hand, who have held it to be the centre of motion, the ancient formation, depend on a nearly balanced and doubtful advocacy of phenomena. Moreover, the advocate in our day of the new formation, who makes the sun the centre of the second motion, as the earth of the first, while the planets, in their respective orbits, seem to join in a dance round the sun, which some of the ancients suspected in the case of Mercury and Venus,—had he pursued his thoughts to their result, seems to have had it in his power certainly to bring the

question to a fair settlement. Nor, indeed, have we any doubt that other hypotheses of such formations, may be invented by ingenious and acute thinkers. Nor are those who promulgate such theories much delighted, because what they propose is true, but only because it is a convenient hypothesis for forming calculations and astronomical tables. But our method has a widely different object. For we seek not accommodations, which may be various, but truth, which is one. To attain this, a genuine history of phenomena would open a way; one tainted with theory would obstruct it. Nor shall we here omit, that we, as the result of such a history of the heavenly bodies, made and accumulated according to our rules, indulge not only the hope of a discovery of the truth with reference to the heavenly bodies, but still more of such discovery in the observation of the affections and appetencies of matter in either world. For that supposed discrepancy between the celestial and sublunary bodies appear to us a figment at once drivelling and presumptuous, since it is most indubitable that a variety of effects, such as expansion, contraction, impression, retrocession, assimilation, union, and the like, have their seat not merely among us, but in the highest part of heaven, and in the entrails of the earth. Other and more faithful interpreters than these there are none whom we can call in and consult, to assist human intellect in penetrating the depths of the earth, which are invisible, and the height of heaven, which is generally seen under optical illusion. Wherefore the ancients excellently devised of Proteus that he was of many shapes, and also noted as the prince of all diviners, knowing the past, the future, and the mysteries of the present. For he who knows the catholic appetencies of matter, and knows by them what is possible, cannot be ignorant what is, and what will be, found true of things taken within them. Wherefore we repose great hope and confidence in the methods of physics for advancing the science of astronomy, meaning by physical inquiries, not those which are commonly thought so, but only the doctrine regarding those tendencies of matter which no diversity of regions or position can detach or dissever from it. Nor would we, therefore, (to return to our theme,) wish any labour to be spared, which could be employed in statements and observations of the heavenly bodies. For, in proportion as there is a richer fund of appearances of this sort, in the same proportion will the whole subject be more easily mastered, and have more solidity. Of which, before we say any thing further, we have reason assuredly to congratulate the world, both on the labour of mechanicians, and the diligence and accuracy of certain learned men, that they have of late attempted so to speak, to establish by means of optical instruments, as by means of trading vessels and passage-boats, to open up an intercourse with the heavenly bodies. And this undertaking we regard as both in its end and endeavour something noble and worthy of mankind. And such men are so much the more deserving of praise, both in their attempt and their basis of belief, because they have honestly and distinctly planted before them the facts for examination as they severally present themselves. It remains only that they have perseverance united with great severity of judgment, that they change their instruments, that they increase the amount of evidence, that they subject to experiments each phenomenon, and frequently, and in a variety of ways; finally, that they both place before themselves and lay open to others, whatever may be objected in favour of the contrary conclusion, and that they do not disdain to notice even the most minute incongruity, lest that should happen to them which happened to Democritus and his old woman about the figs of exquisite flavour, namely, to find the old wife wiser than the philosopher; and lest some silly and ridiculous mistake should lie at the bottom of a high and soaring theory. Having premised these remarks on the general subject, let us proceed to a more detailed statement of our astronomical history, in order that we may show both what, and what kind of facts, ought to be inquired into in regard to the heavenly bodies. First, then, we shall propose the questions of natural philosophy, or, at least, some of them, and those of greatest moment to the use of man. Next after these we shall mention those uses to mankind which may probably be derived from the contemplation of the heavenly bodies: both of these as showing the design of the history: that those whose task it shall be to compile a history of the heavenly bodies may know what they do, and may have these questions, along with the works and practical effects to arise from them, in their minds' eye and contemplation. Whence they may build up and prepare a history such as shall be adapted for the decision of questions of this sort, and for furnishing such fruits and advantages to mankind. We mean questions of that kind which are applicable to the doings of nature, not their causes. For that is the proper province of history. We shall then perspicuously state in what the history of the heavenly bodies consists; what are its parts; what things are to be learned or examined; what experiments are to be set on foot and performed; what observations are to be used and weighed; thus proposing, so to speak, certain inductive topics or articles of examination respecting the heavenly bodies. Lastly, we shall state something not only concerning what ought properly to be inquired into, but concerning this,—how, when the inquiries are completed, they ought to be meditated, and exhibited, and reduced to writing; lest the diligence employed in the first part of the inquiry should be lost in what succeeds; or, which is

worse, lest the advances subsequently made should proceed upon feeble and fallacious foundations. Finally, we shall state both with what object, and what, and how, inquiry ought to be made respecting the heavenly bodies.

CHAPTER VI.

That Philosophical Questions about the Heavenly Bodies, even though they go beyond the common Ideas, and be somewhat difficult, ought to be canvassed. And there are proposed five Questions about the System itself: whether it be a System? and, supposing it to be so, what is its Centre, what is its Depth, what is its Connection, and what its Distribution of Parts?

And now, doubtless, we shall be considered by some as disinterring the ashes of old questions, long, as it were, consigned to the dust of the grave; nay, as evoking their very ghosts, and urging them with fresh interrogatories of our own. But since the philosophy, hitherto in vogue, respecting the heavenly bodies, has no solidity; and since this has been always laid down by us as a sacred and invariable rule, that all must abide the new award of a legitimate induction; and since, if perchance some questions are left behind us untouched, so much the less industry and pains will be exerted in collecting the facts upon them, in consequence of its appearing superfluous to inquire into points on which no question has ever been moved: we hold it necessary to take in hand all questions which the universe may anywhere offer to our consideration. Besides, in proportion as we are less assured of our ability to determine questions by the method we pursue, so much the more confidently do we entertain them. For we see how all must end.

The first question, then, is, whether there be a system, that is, whether the world, or universal frame of things, be a spherical whole, possessing a centre? or, rather, whether the single globes of the earth and stars are placed in dispersion, and each attached, as it were, by its own root, without a common middle point or centre? The school of Democritus and Epicurus, it is true, made a boast that their authors had "broken down the walls of the world." Yet that, certainly, is not a consequence of the tenets maintained by them. For Democritus having laid down his notion of matter, or seminal atoms, infinite in number, limited in their properties and powers,—atoms in agitation, and from eternity unfixed in any possible structure or position, was not led, in virtue of that opinion, to maintain the existence of a number of worlds, distinguished by variety of form, subject to birth and dissolution, some better constructed, some more loosely coherent, also of embryo worlds, and agglomerations formed between world and world. But, were all this assumed, it hinders not that the portion of matter which has been assigned to the structure of this our world, lying, as it does, under our own observation, should possess a spherical figure. For, necessarily, each of those worlds must have taken some configuration. For allowing that in infinity there can be no central point, yet in the parts of that infinity there may exist a spherical figure, no less in a world, than in a mortar. Democritus, however, excelled only as an analyzer of the world: in dealing with its aggregates and totality, he was inferior even to ordinary philosophers. The opinion of which we are now to speak, which really destroyed and exploded the notion of a system, was that of Heraclides of Pontus, Ecphantus and Nicetas of Syracuse, and particularly of Philolaus, also in our age of Gilbertus, and all (except Galileo) who have held that the earth is a planet, moves, and is, as it were, one of the stars. And this idea has solidity thus far, that the planets and single stars, and the countless number which from their distance baffle our vision, and others also unseen by us, from their being not of a luminous but opaque nature, each in its respective orbit and primary tour through that illimitable expanse which we behold, whether of vacant space or of some subtler and almost indiscernible substance, are dispersed and lie about like islands in a vast ocean, and revolve not upon a common centre, but each upon that of its respective orbit, some absolutely, others with some progressive motion of their own centre. There is one very great difficulty in their opinion, namely, that they altogether banish *rest*, or an immovable point of nature. Now, it seems that, as there are in nature revolving bodies which are borne along in interminable and ceaseless motion, so, on the contrary, there ought to be some body which is quiescent; between which we place the intermediate nature of those which are carried in a straight-lined path, since motion in a straight line is suitable to fragments of spheres, and things exiled, so to speak, from their natural seats, which move towards orbs homogeneous with themselves, in order that, united with these, they may either be rotatory or quiescent. But of this question, whether there be a system, a conclusion will be obtained by means of those which relate to and determine the motion of the earth, whether the earth revolve or be at rest, and to the matter of the stars, whether it be solid or igneous? For, if the earth stands still, and the heavens perform a diurnal revolution, undoubtedly it is a system; but if the earth be rotatory, it is, nevertheless, not absolutely proved that it is not a system, because we may still fix another centre of the system, such as the sun, or something else. Again, if the orb of the earth alone is crass and solid, it seems as if the matter of the universe was agglomerated and condensed into that centre: but if the moon and other planets are found to be also

composed of crass and solid matter, it seems that dense bodies do not unite in any centre, but lie dispersedly, and, so to speak, at random. Finally, if in the interstellar spaces we place a *vacuum coacervatum*, then the several orbs should seem to have round them, first, the envelope of certain subtle effluvia, and then the vacuum. But if these spaces are a *plenum*, there should seem to be a union of the denser in the centre, and an expulsion of the rarer substances, to the circumference. Now, it contributes materially to science to know the connexions of questions with one another, because under some of them there is found history or inductive matter to furnish their solution, under others none.

But, granting a system, next comes our second question, What is the centre of the system? For, if to any of the orbs ought to be assigned the central place, there appear first to be two orbs which present the character of a middle point or centre—the earth and the sun. In favour of the earth there are our senses, an immemorial opinion, and most of all this circumstance, that as dense bodies contract into a narrow, and rare are diffused over a wide space, and the area of every circle contracts towards its centre, it seems to follow of necessity that the contracted part should be placed at the centre of the world, as the appropriate, and, as it were, the only place for dense bodies. For the sun again this reason makes, that to a body whose functions in the system are greatest and most potent, that place ought to be assigned from which it can best act upon, and diffuse its influence over the entire system. To this we may add that the sun evidently has as his satellites Venus and Mercury, and, in the opinion of Tycho, also the rest of the planets; so that the sun plainly appears to possess the nature, and to perform, in some instances, the office of a centre. Therefore we are brought so much nearer the determination that it is the centre of the universe, which was the assertion of Copernicus. But in the system of Copernicus there are many and great difficulties: first, there is something revolting to belief, in encumbering the earth with three motions, in detaching the sun from the group of planets with which it has so many common properties, in introducing so much immobility into the system of nature, (particularly by making the stars and sun immovable, the bodies most luminous and sparkling of any,) in wishing to fasten, as it were, the moon to the epicycle of the earth, and in some other assumptions which he makes; savouring of the character of a man who thinks nothing of inventing any figment at the expense of nature, provided the bowls of haphazard roll well. But if we are to ascribe motion to the earth, it seems more consistent to banish the idea of a system, and of various globes conceived to be distributed over space, according to the idea of those whom we have already mentioned, than to establish such a system with the sun for its centre. And the consent of later ages and of antiquity has rather anticipated and sanctioned that idea than not. For the supposition of the earth's motion is not new, but, as we have already said, echoed from the ancients; but that of the sun being the centre of the world, and immovably fixed, is entirely new, (if we except the supposed mention of it in an ill translated verse,) and was first promulgated by Copernicus.

A third question follows with respect to the depth of the system, not that any exact measure of it can be taken, but that it may be set down for certain: whether the starry heaven is, so to speak, one region, or, as it is commonly expressed, orb, or whether the stars which are denominated fixed, are higher than the others, in a sort of abysmal profound? For it cannot be that they are of equal height, if we understand this strictly; for the stars are undoubtedly not arranged as in a plane, having a certain measurable size on a superficies, like spots or embedded gems, but are entire globes, large, and lying deep in the profound. Wherefore, when they are found of such disproportionate magnitude, it is by all means requisite that some of them should come out more than others, either upwards or downwards; nor can it be that, either in the upper or lower part of them, they are joined in one continuous layer. Were this true of certain portions of the stars, it would be rash to assert it of them in the aggregate, that the stars are not higher placed the one than the other; but even though this were true, still we can affirm a defined and very perceptible depth or thickness of that region which is called the sphere or starry heaven, containing such projecting points and varieties of altitude; for we see, from the apogees and perigees of the planets, that there belongs to their several heavens a certain distinguishable depth through which they mount and descend. But that question only regards this point, whether there are stars one above another, as planet above planet, and, as it were, in different orbits? And that again is in like manner collateral to the other question, regarding the motion or condition of the earth. For if the stars revolve with a diurnal motion about the earth, since they are all carried with the like celerity, and, as it were, with the one impulse; and since it is plainly apparent that each of the planets, as it varies in height or lowness of position, so it also varies in rapidity or slowness of motion; it is probable that stars, equal in the swiftness of their revolution, are placed in one region of ether, of which, although the thickness or depth may be supposed considerable, still it is not so great as to create a difference in their incitation or celerity, but only such, that through the whole of each region respectively, all the bodies revolve simultaneously, as if fastened with the chain of one common essence, or, at least, with such discrepancy as, by reason of the dis

tance, is not brought within our vision. Now, if the earth moves, the stars may either stand still, (as Copernicus thought,) or, which is far more probable, and was suggested by Gilbertus, they may revolve each in its place round its own centre, without any motion of that centre, (as the earth does, if you divide its diurnal motion from those two supposed motions which Copernicus has superadded to it.) For whichever of these is the fact, it hinders not that there may be stars ranged one above another, till they escape our vision.

The fourth question relates to the cohesion of the system, or to the substance connecting it. As to the nature and essential properties of that body or thing which is thought to be pure ether, and is interfused between the stars, we shall presently inquire. We shall now speak only of the principle of cohesion in the system. There are three modes of viewing this. For we must either grant a vacuum, or a substance whose parts are in contact, or, lastly, in continuity. Our first inquiry is, whether there is an extent of absolute vacuity or a *vacuum coacervatum* in the interstellar space, which Gilbertus ably maintained, and which several of the ancients appear to countenance, who supposed that the various orbs were scattered about without any regular system, especially those who declared the bodies of the stars to be compact masses. Such an opinion amounts to this, that all the globes, as well the stars as the earth, consist of solid and dense matter. That they are enveloped, next their surface, with a certain description of bodies, which are so far homogeneous to their respective globes, but nevertheless more thin, feeble, and attenuated, and which are nothing but effluvia or emanations from the globes themselves, such as are vapours and exhalations, and air itself, if compared with earth. That these effluvia reach to a distance not considerable round each several globe, and that the rest of the interval between the globes, which is incomparably the largest part, is a void. Which opinion we may be prepared to adopt by the fact, that the bodies of the stars are visible from such a prodigious distance. For, were the whole of that space full, especially of bodies extremely unequal in their degrees of density and rarity, so great would be the refraction of their rays, that they could not be propagated to our vision, which, if by far the greatest portion of this space were unoccupied, it is consistent to believe they might be. And, indeed, this question seems to depend, in a great measure, on the question which we shall immediately bring forward respecting the substance of the stars, whether it be dense, or subtle, or expanded? For, if their substance be solid, it should certainly seem as if nature were only occupied and in action about these globes, and their boundaries, and had neglected, and, as it were, left fallow the interposed spaces. Wherefore, it is not improbable that the globes are, towards their centres, more compact, towards their surface more lax, in their circumambient substances and effluvia grow less substantial still, and finally terminate in a vacuum. On the other hand, if the essence of the stars is subtle and igneous, it will be manifest that the nature of rare is not merely privative, but of itself a powerful and primary element, not less than the nature of solid, and that it exists in force or prevails in the stars, in ether, and in the atmosphere, so that there is need of the hypothesis of a *vacuum coacervatum*. That question, too, about a vacuum in the interstellar fields, will depend upon another connected with the great principles of nature: whether we must admit a vacuum at all? And this not without modifying it by a distinction: for it is one thing to deny a vacuum absolutely, and another to deny a *vacuum coacervatum*. For, much more solid reasons may be alleged for a *vacuum intermistum* being interposed to keep bodies in a certain degree of laxity, than for maintaining a *vacuum coacervatum*, (or large vacant spaces.) And, not only was that ingenious man, and great mechanician, Hero, sensible of this, but also Democritus and Leucippus, the inventors of the theory of a vacuum, which Aristotle attempts to attack and overthrow by certain logical subtleties. These two most acute and famous philosophers admit a *vacuum intermistum* in such a manner as to exclude a *vacuum coacervatum*. For, according to the opinion of Democritus, every vacuum is so limited and circumscribed as not to admit of the separation or disruption of bodies beyond certain limits, no more than it does of their contraction and consolidation. Though, in what has been preserved of the writings of Democritus, this is nowhere propounded explicitly, yet he seems to say this, that bodies, as well as spaces, are infinite, that, otherwise, (that is, if there were in fact infinite space and finite bodies,) bodies would never cohere: therefore, on account of coinfinity of matter and space, a vacuum is necessarily compressed into certain limits; which seems to have been his opinion, truly and accurately understood; in other words, that certain limits must be set to the development or expansion of bodies through the permeating vacuum; not granting a vacuum apart, or space unreplenished with body. But, if there cannot be admitted in the system, a vacuum of the nature of a solution of continuity, yet, seeing there is found in the parts or portions of the system so extreme a diversity of bodies that they seem to be of different races and countries, there arises a second question which relates to the connection of the system; it is this, whether pure ether be one entire or unbroken stream, or whether it consists of a variety of contiguous parts? Now, it is no part of our character to subtilize about words: but, by a contiguous body, we understand one which lies upon, without being

amalgamated with, another body. Nor, again, do we mean some impenetrable or hard superstratum, such as the astronomers in general mean, but one such as fluids exhibit, in the instance of water floating on the top of quicksilver; oil, of the water; air, of the oil. For, no one can doubt that in the immense expanse of ether there are immense differences in rarity and density, and in many other properties: but granting either, that is, a plenum or vacuum, this may equally be the fact. For, it is sufficiently certain, that not even in the sea itself, the water at the top and at the bottom is of the same consistency and taste; and, in the air, there is extreme difference between the air contiguous to the earth, and the upper air, and yet it is one entire and unbroken liquid body. The question is therefore brought to this point: whether the differences in the tract of pure air, as it were, insinuate themselves in a continuous stream of imperceptible gradations, or are distributed and arranged into defined and conspicuous limits, where bodies are joined in their locality, which could not be amalgamated, even as among us air lies on water. For, to one who considers the matter simply, the whole of that clear and limpid substance in which the globes of the earth and sun are suspended and float, and which, being interposed between those globes, by its quantity and the space which it occupies, exceeds the dimension of the globes, so to speak, innumerable times,—is a thing undivided and perfectly united within itself. But, to one who looks into nature more correctly, this will plainly appear, that nature is wont to make her way from one locality to another, now by steps, anon abruptly by leaps, and then reverses the progression. Otherwise, if any one really looks into the case, there could be no structure, no organized figure, did nature always proceed by imperceptible degrees. Wherefore, this process by gradations may be fitly placed in the intervals between worlds, but not in a world; to the organization of which it is required that things much dissimilar should be severed the one from the other, and yet brought into close contiguity. Thus it is that the air embraces and is in contact with the earth and waters, a body widely different, and yet placed in proximity, not in the order of, first, earth, then vapour or fog, then pure air, but air at once without an intermediate body.

And in the air and ether, two substances we usually join with one another, the most conspicuous and thorough diversity of all may be observed, from their quality being more or less susceptible of a starry nature. There appear, therefore, to be three regions most distinctly lying between the earth and the highest point of heaven; that is, the region of the air, the region of the planetary heaven, and the region of the starry heaven. Now, in the lowest region the substance of the stars is not found, it exists in the middle in the form of conglobation into certain orbs, but in the highest heaven it is dispersed into numberless globes, so that in its highest region it seems to migrate, as it were, into the pure empyreum. Meantime, that must not be forgotten which we mentioned a little before, that nature is accustomed to alternate fine gradations and distinct transits in her processes, so that the confines of the first communicate with the second, and of the second with the third. For, in the upper air, after the air has begun to be purified from the effluvia of the earth, and refined by the vicinity of the heavenly bodies, flame searches out its way and struggles into form; as we see in the lower kind of comets, which are of an intermediate nature between the steady and evanescent sidereal nature. And, again, the part of heaven near the sun appears to grow stellescent, and to pass into a starry essence. For those maculæ which are discoverable, by a faithful and careful observation of the sun, are a sort of germ or rudiments of starry matter; and, in the heaven about Jupiter there are also visible complete and perfect stars, though, from their minuteness, invisible without the help of telescopes. And, again, in the upper parts of the starry heaven, from numberless scintillæ in the ether between the fixed stars, (for which other sufficiently unmeaning reasons are given,) the starry essence seems to be more diffused and spread out continuously. But, of these points we shall say more in discussing those questions, which we presently propose to consider, respecting the substance of the stars and the interstellar ether. For, what we now say relates only to questions respecting the connection of the system.

A fifth question remains concerning the distribution of the parts of the system, or the order of the heavenly bodies. And granting that there is not a system but only scattered globes, or granting that there is a system, the centre of which is the sun, or even allowing the astronomers to go in quest of some new system, still there remains equally this inquiry: What planet is nearer or more distant from any other planet? and, in like manner, what planet is at a greater or less distance from the earth, or even from the sun? Now, if the system of the ancients is admitted, there seems no reason why we should attach great importance to any new inquiry concerning the four higher heavens, namely, those of the fixed stars, of Saturn, Jupiter, and Mars. For their position and order are testified by the suffrage of all antiquity, and by the absence of any contradictory phenomenon; their modes of revolving also, whence is derived our principal evidence of the relative heights of the heavenly bodies, are adapted to this structure, and nowhere interfere with it. But, as to the sun, Venus, Mercury, and the moon, even on the principles of the old system, there was some doubt among the ancients; and among the moderns it is still a question, with

respect to Venus and Mercury, which planet is higher than the other? For in favour of the superior height of Venus this reason offers itself, that it moves somewhat more slowly; and of Mercury, that it is fixed at a nearer distance from the sun, whence one should naturally maintain that it ought to be placed next the sun in height. But, as to the moon, no one ever had any doubt that its place was next the earth, though there was a difference of opinion with regard to its approaches to the sun. Nor ought one question relating to the arrangement of the system to escape a serious inquirer into the subject, which is this, whether the planets alternately pass over and pass below one another? which seems to be authenticated in the case of Venus by elaborate demonstrations of the fact that it is found sometimes placed below the sun, sometimes above it. And, doubtless, also this is an apt question: whether the deflection of the lower planet does not cut the orbit of the higher planet, and enter within its periphery?

There remains our last question concerning the collocation of parts in the system, that is, whether there be several and different centres in the system, and several choral bands, so to speak, moving around them; especially since the earth is affirmed to be the centre of primary motions; since the sun (in the opinion of Tycho) is the centre of secondary motion; and even Jupiter is made, by Galileo, the centre of the inferior and lately discovered motion of certain satellites.

These, then, are the questions which it seems fitting to propose with respect to the celestial system: namely, whether there is a system, and what is its depth, what its connexion, and what is the order of distributing its parts. As to the outermost parts of heaven, and what has been termed the empyrean heaven, we enter into no theories or inquiries. Therefore, what can be known of it can be learned only from inference, not at all by induction. For such inquisition, therefore, there will both be a fitting time, and a specific plan and mode.

As respects the heaven of heavens and pure space, we are bound entirely to stand by, and submit to, revelation. For, as to what has been said by the Platonic school, and lately by Patricius, (in order, forsooth, to exalt themselves to a diviner height in philosophy,) and said not without gross and visionary extravagance, the ravings, as it were, of a disordered mind;—in short, advanced with extreme audacity and no result, like the *acones* and other dreams of Valentine, these we regard as mere figments. For we are not tamely to submit to the apotheosis of folly, like that of the Emperor Claudius. It is worse than all other evils—the very pestilence and death of intellect—to attach reverence to its chimeras.

CHAPTER VII.

The following are Questions relating to the Substance of the heavenly Bodies; viz. What Species of Substance is that of the heavenly Bodies generally, compared to sublunary Bodies;—the Substance of the interstellar Ether compared to the Body of a Star;—the Substance of the Stars themselves compared to one another, and compared to our Fire, and in its proper Essence;—and what Species of Substance is that of the Galaxy, and of the opaque Maculæ visible in the Antarctic Hemisphere? Then the first Query is set forth, Whether there is a diversity of Substance between Bodies celestial and sublunary, and in what it consists?

Having finished our inquiries respecting the system, we must now proceed to those which regard the substance, of the heavenly bodies; for it is the substance of the heavenly bodies, and the courses of their motion, that philosophy chiefly seeks to know. Astronomy investigates their real motion itself and its properties—both astronomy and philosophy their influence and effect.

Care ought to be taken, however, accurately to distinguish between astronomy and philosophy: astronomy preferring those hypotheses which are most convenient for shortening the method of calculation; but philosophy those which most approximate to the truth of nature:—further, that, on the one hand, the hypotheses of astronomy do not in any way prejudge truth; and on the other, the positions of philosophy be such as are perfectly tenable upon the phenomena of astronomy. Whereas, on the contrary, the fact now is, that the figments of astronomy have insinuated themselves into philosophy, and perverted it; and the theories of philosophers about the heavenly bodies are reconcilable only to themselves, and in a great measure abandon astronomy, contemplating in general the system of the heavens, but by no means accommodating themselves to particular phenomena and their causes. Thus, while either science, such as we now have them, is a thing superficial and perfunctory, the foot must be planted more vigorously by far on this foundation—that these two sciences, which, by reason of the contracted speculations of men, and the practice of academic teachers, have been habitually disconnected for so many ages, are one and the same thing, and concrete in one body of science.

Therefore we propose it as our first question, Whether or not there is a diversity between the substance of the heavenly bodies and that of this lower orb? For the premature and dogmatical doctrine of Aristotle has created for us only an *imaginary* heaven, formed of a certain fifth essence, without change, and also without heat. And, waiving for the present any discussion respecting the four elements which this quintes-

sence takes for granted, it was certainly a piece of great temerity to annihilate all affinity between the elementary substances, as they are called, and the heavenly bodies; when two of the elements, namely, air and fire, agree so well with the star and the ether; but it was the custom of that great man to abuse his genius, create work for himself, and prefer the obscure. Not, however, that there is any doubt that the regions situated above and beneath the moon, along with the bodies comprehended within the same limits and space, differ in many important particulars. Nor, again, is this more certain than that in the bodies of each region there exists many tendencies, affections, and motions common to both; so that, preserving unbroken the unity of nature, we ought rather to discriminate than to pluck them forcibly asunder. And, as regards one part of the supposed discrepancy, namely, that the celestial bodies are imagined to be eternal, the sublunary perishable, that doctrine seems to be a fallacy either way, as neither that eternity which they fancy is true of heaven, nor that mutability of earth. Indeed, to one who justly weighs the matter, a judgment ought by no means to be formed from those things which are visible to us, since none of the objects which meet the human eye are dug or cast up from a greater depth than about three miles at most, which is as nothing compared to the diameter of the earth. Therefore nothing hinders that the interior part of the earth may be endowed with a like eternity to heaven itself. For if the earth were subject to changes in its womb, it is impossible that the results of those changes should not produce greater calamities on the surface of it which we tread, than we see taking place. For, of those changes which present themselves conspicuously to us here in the direction of the surface of the earth, there is generally some visible and apparent cause acting from above, such as tempests, rains, heat, and the like; so that the earth of itself, and of its own virtue, seems to furnish the cause of almost none of its changes. If it is conceded (which indeed is not improbable) that the earth itself too, and not heavenly bodies only, acts upon the fields of air, either by an efflux of cold, or by emitting winds, or some other similar modes, still all that variety is ascribed only to some portions of the earth in immediate contact with the air itself, in which none will deny there exists a multitude of changes and vicissitudes. But it must be fully admitted that, of the phenomena of the earth, earthquake enters the deepest by far into its bowels; and, which are of the same class, gushes of water, volcanoes, fissures and convulsions of the earth and the like, which, notwithstanding, do not seem to rise from a great depth, since most of them generally affect but a certain limited portion of the earth's surface. In proportion as an earthquake affects a larger space on the earth's surface, in the same proportion we are to infer that its roots and source enter deep into the mass of the earth; and the contrary, in proportion as it is less extensive. But if any one should allege that there sometimes happen earthquakes which shake large and extensive tracts of country,—no doubt it is so. Yet these rarely occur, and are among the number of the greater calamities of the species, and may, therefore, be compared to the higher order of comets, which are also of rare occurrence. For, we do not now discuss whether eternity absolutely may be affirmed of the earth, but would make it appear, as we stated at the commencement, that with reference to constancy and mutation there is no great difference between heaven and earth. We do not consider it worth while to contend for the eternity of the earth from the modes of its motion. For it were superfluous to argue eternity from the properties of motion, since, if a circular motion is without a limit, so is rest: eternity may equally be predicable of the coherency of compact and large masses of homogeneous substance, as of the rotation of rarer bodies; the parts detached from either flying off in right lines.

This also may be assumed in reasoning upon the point, that the internal parts of the earth are not more exposed to decay than heaven itself; because something generally perishes of that body wherein something can be repaired. Now, when showers, and substances which are precipitated from the air, and which renew the upper surface of the earth, in no way find a passage into the interior parts of the earth, which, nevertheless, remain fixed by their own gravity and magnitude, it follows of necessity that nothing is subtracted, since there is nothing added to succeed it. Finally, that changeableness which we discover in the outmost portion of the earth seems itself to be only accidental. For that slight crust of the earth, which appears only to dip a few miles downwards, (within which limits are contained those admirable laboratories and workshops of plants and minerals,) would by no means afford so great a variety, much less of such beautiful and high-wrought productions, unless that part of the earth was exposed to action, and ceaseless vellication, from the bodies above. Now, if any one think that the warmth and action of the sun and heavenly bodies can transverberate the thickness of the whole earth, such a man may be justly regarded as a superstitious and phrenetic dreamer, since it is clearly seen with how small an impediment they may be refracted and kept out. Thus far of the indissolubility of the earth. Let us now inquire of the changeableness of the heavenly bodies.

First, then, we are not to use this mode of reasoning, namely, that the mutations do not take place in heaven because they do not come within our own observation. For remoteness of dis-

tance, excess or want of light, and fineness or minuteness of substance, equally baffle vision: thus, if the eye were placed in the orb of the moon, it could not discern those changes which take place amongst us here on the surface of the earth, such as inundations, earthquakes, structures, or huge masses, which at so great a distance are not equal to the size of a gnat.

Nor should any one from the circumstance of the interstellar air of heaven being transparent, and the stars on a clear night appearing of the same number and form, pronounce too readily, that the entire body of the ether is diaphanous, firm, and immutable. For the atmosphere itself is subject to endless varieties of heat, cold, scents, and every sort of amalgamation with subtler vapours, yet does not therefore lose its pellucid quality: so in like manner we are not to trust to that feature and aspect of heaven. For, if those huge masses of clouds which occasionally cover the heavens, and take from our sight the sun and stars, on account of their nearness to our point of vision, were suspended in the upper part of the atmosphere, they would by no means change the appearance of a serene sky: for neither could they be seen themselves on account of the distance, nor cause any obscuration of the stars, on account of the smallness of their size, compared to the magnitude of the stars. Besides, the body of the moon itself, except in the part in which it receives light, does not alter the appearance of the sky, so that were that light annihilated, so large a body would entirely escape our view. But, on the contrary, it is clearly apparent from those bulky bodies, which by their mass and magnitude overcome the effect of distance, and on account of their luminous or sparkling substance forcibly strike our view, that surprising changes and anomalies happen in the heaven. And that is perceived in the higher order of comets, I mean those which assume the appearance of a star without the *coma*, and which are not only proved by the doctrine of parallaxes to be placed above the moon, but bear a certain and unchangeable relation of position to the fixed stars, and retain their stations without being erratic; of such our age has seen more than one, first in Cassiopæa, and afterwards not long ago in Ophiuchus. And as to this kind of regularity, which is seen in such comets, arising from their following the motion of some star, (which was the opinion of Aristotle, who asserted that there was a like relation of a comet to the motion of a particular star, and of the galaxy to that of the stars collectively, both positions being false,) that has now been long exploded, not without a stigma on the genius of Aristotle, who in his airy speculations had the presumption to invent such things Nor in fact does this change in the heavenly bodies with respect to such new stars, obtain only in those stars which appear to be of a vanishing nature, but also of those which remain in their place. For, in the instance of the new star of Hipparchus, of the appearance of which mention is made among the ancients, there is none made of its disappearance; a new star has lately become visible in the breast of Cygnus, which has now continued for twelve entire years, exceeding the duration of a comet, which it has been held to be, by a considerable period, and not yet lessened in disk, or threatening to disappear. Nor, again, is it properly and invariably true, that the old stars are not subject to change, but only the stars of later epiphany, in which it is not to be wondered if change takes place, since their very production and commencement is not immemorial. For, passing over that fable of the Arcadians with respect to the first appearance of the moon, in which they boast that they are of greater antiquity than that planet, there are not wanting in history sufficiently authenticated facts on the subject, as when the sun three several times—without the occurrence of an eclipse, or the intervention of clouds—appeared in a clear and serene sky, changed in appearance for many days, and yet not affected in the same way each time, being once of slender light, and twice of a ferruginous colour. For these phenomena took place in the year 790, during seventeen days, and in the time of Justinian during half a year; and after the death of Julius Cæsar, during several days. To that obscuration we have still extant that noted testimony in Virgil:—

> Ille etiam extincto miseratus Cæsare Romam
> Cum caput obscura nitidum ferrugine texit,
> Impiaque eternam timuerunt sæcula noctem.

And the statement of Varro, a most skilful antiquary, to be found in Augustine respecting the planet Venus, to this effect, that in the reign of Ogyges it changed its colour, size, and figure, might well have been doubted, had not a similar fact occurred again, signalized by much observation in our own days, in the year 1578. For then, too, during a whole year, a memorable change took place in the planet Venus, which was seen of unusual size and brilliancy, exceeding in redness even the planet Mars, and more than once changed its figure, becoming sometimes triangular, sometimes square, and sometimes circular, so that even its very body and substance seemed to be affected. Again, that star among the old stars, placed in the hip of Canicula, which Aristotle says he himself saw, having some coma, which he particularly noted, vibrating when he looked at it intently, appears to be since then changed and to be divested of its hair, since no trace of that appearance is found on it in our day. Add to these facts that many alterations of the celestial bodies, particularly of the smaller, from neglecting to make observations, easily escape notice, and are lost to us. Now, it will readily occur to a sciolist to ascribe such appearances to exhalations and the constitution of the medium

of vision; but these alterations, which are found to affect such a body continuously and equally for a considerable time, and to accompany it in its revolutions, ought to be placed altogether to the account of the star itself, or at least something in the ether contiguous to it, not in the lower tracks of the air; of which we may assume this as a strong argument, that such changes rarely occur, and at long distances of years, but those which take place in the atmosphere by the interposition of vapours more frequently. And if any one forms a judgment from the regularity of the heavenly bodies, and the equability of the motion itself, that the heaven is immutable, and should set down the exactness of their periods and renewals as a distinct mark of their eternity—seeing constancy of motion seems scarcely compatible with a perishable substance—he ought to advert a little more attentively to this, that such a periodical reappearance, as if in a cycle, at stated intervals, may be even found among ourselves in several things, particularly in the tides of the ocean; besides, smaller variations which may obtain among the heavenly bodies, their dates and renewals, escape our vision, and baffle our calculations. Nor ought the revolution of the heavenly bodies in a circle to be taken as a better proof of their eternity, because, forsooth, there is no end to impulsion in a circle, and an immortality of motion is agreeable to an immortality of substance. For even the secondary comets, which have their place lower than the moon, perform revolutions, and that from a property of their own; unless we are to give credit to the figment of their being attached to stars. For if we will argue the eternity of the heavenly bodies from their circular motion, that ought to be referred to the entire system of the heavens, not to its parts; for the atmosphere, the sea, and the land, are eternal in the totality, perishable in the parts. Besides, on the contrary, we ought not to presume the motion of the heavenly bodies from their revolving motion, because that very motion is not a perfect one, nor renewing itself absolutely in an exact, and pure circle, but with declinations, eccentricities, and ellipses. Moreover, if any one should retort upon us the observation we made respecting the earth, in stating that those changes which occurred in it were accidental, not substantial, and arose from the action upon it of the heavenly bodies, and should assert that the relation of heaven is directly contrary, since the heaven can in no way be reciprocally influenced by the earth, and any efflux from the earth falls short of the sphere of the heavenly bodies; so that it is probable that heaven, placed aloof from all action adverse to its durability, is susceptible of eternity of duration, since it is not at all agitated or infringed upon by an antagonist substance; this seems an objection not to be despised. For we are not likely persons to defer to the childish notion of Thales, who conceived that the heavenly bodies absorbed the exhalations raised by the earth and sea, and were therewith fed and repaired; (since these exhalations generally fall in a like quantity as they have mounted, and are by no means enough to refresh both the earth and the spheres of heaven, nor by possibility extend to such a height;) yet, notwithstanding, though the gross evaporations of the earth stop far short of heaven, if the earth be the "*primum frigidum*" (principle of cold,) according to the doctrine of Parmenides and Telesius, it would not be easy or safe for any one to affirm to what height this force, the antagonist and rival of that of heaven, penetrates by a gradual and successive approximation; especially as these substances imbibe and propagate to a great distance the nature and effects of heat and cold. Yet, granting that heaven is not affected by earth, that is no objection why the heavenly bodies should not mutually suffer action and change one from another; the sun for instance from the stars, the stars from the sun, the planets from both, all from the interposed ether, particularly that circumambient to the several spheres. Beside, the opinion of the eternity of heaven appears to have derived great force from that mechanism and fabric of heaven, which the astronomers have busied themselves to very little purpose to invent. For they seem to have taken infinite trouble to guard against the opinion that the heavenly bodies suffer any influence but the effect of mere rotation, being in other respects unchangeable and imperturbable. They have therefore nailed up, as it were, the stars in their orbits. And in their several deflections, elevations, depressions, and windings, they have detected as many perfect circles of the just diameter, elaborately paring and smoothing both the convex and the concave side of these circles, so that there is found in them no projection or abruptness; but the one being received within the other, and, by reason of its smoothness of curve, placed in exactly the proper contiguity, yet so as to slide easily into one, move serenely and kindly; which immortal system of impulses easily precludes all agitation and disturbance, the precursors of dissolution. For, doubtless, if bodies so great as are the starry orbs while cutting the ether, do not always continually describe the same paths in the expanse, but pass through regions and tracks far removed from one another, sometimes ascending the upper fields of space, sometimes descending towards the earth, sometimes directing themselves to the south, sometimes to the north, there is imminent danger that numerous impressions, shocks, reactions, and recoils, should take place in these bodies, and that from these should arise the condensations and rarefactions of substance which prognosticate and breed productions and alterations. But, since from physical considerations, and, moreover, from the phenomena themselves, it will hold that this

latter position is the truth, and that the former fictions of astronomers, if any one looks at them soberly, in reality mock nature, and are found empty of facts: it is consistent that the notion—their concomitant—of the eternity of the heavenly bodies, should incur the same censure. And if any one should make religion an objection, we would have him thus answered; that it was the boast of the heathens to attach eternity only to the heaven and the sun, but that sacred Scripture ascribes it equally to heaven and earth. For there we read not only that "the sun and the moon bear faithful witness in heaven;" but that all "generations come and pass away, but the earth remaineth forever." And we find the fleeting and perishable nature of both coupled in one and the same oracle; "heaven and earth shall pass away, but my word shall not pass away." Then if any should insist, that nevertheless it cannot be denied, but that on the surface of the earth, and the contiguous parts, innumerable changes take place,—not in heaven; we meet the objection thus: that we do not make them equal in all respects; and yet, if we take the upper and lower regions of the air, as they are called, to be the surface or exterior coat of heaven; even as we regard that space among ourselves, within which animals, plants, and minerals are contained, as the surface or outer garment of earth, there too we find numerous and manifold productions. Wherefore it seems as if all collision and disturbance took place only on the frontiers of heaven and earth, as is frequently the case in matters civil, when the inland provinces of two neighbouring countries enjoy continued peace, and are only thrown into commotion by the more rare and formidable kinds of war.

And with respect to that other part of the supposed heterogeny of the heavenly bodies, as maintained by Aristotle, that they are not subject to heat, lest perchance the conflagration dreaded by Heraclitus might be the result, but that they are warmed, *per accidens*, by the friction and diverberation of the air; we do not understand what this straggler from experience means, contradicting too, as he does, the sense of antiquity on the subject. But it is nothing wonderful to find *that man** divorcing any given subject from experience, and presently turning away in a sort of scorn from nature,—at once pusillanimous and audacious. Of that, however, we shall presently speak, when we come to the question, "whether the stars are real fires," and more largely and correctly in our counsels respecting the History of Virtues, where we shall discourse of the sources, and cradles of heat and cold, as yet unknown to and untouched by man. Thus we have stated the question with respect to the heterogeny of the heavenly bodies. For though, perhaps, the case demands that we should condemn, without postponing the conviction, the doctrine of Aristotle, it is not consistent with our purpose.

Another question proposed was, what that substance is contained in the interstellar spaces? These are either a void, as Gilbertus conceived; or filled with a substance, which is to the stars what air is to flame, the hypothesis most closely approaching the experience of our senses; or filled with a substance essentially the same with that of the stars themselves, luminous, and to a certain degree empyrean, but of a secondary order, being of a light not so brilliant and coruscating, which seems to be meant by the received opinion that a star is the denser part of its own sphere. For there can be no objection to conceiving it a bright, transparent medium, for conveying stronger light. Telesius has acutely observed, that common air contains within itself a certain quantity of light, using this argument, that there are certain animals which see by night, whose visual organs are adapted to receive and kindly entertain this weak sort of light. For it is a less credible supposition that a visual act takes place without any light, or from the internal illuminating power of the spirit. And even flame itself is seen diaphanous, to such a degree as to give out the form of opaque substances, as is seen in the wick of candles, much more to be the vehicle for the form of more intense light. For the flame of tallow or wax is more lustrous, and, if we may use the expression, more igneous: but the flame of spirits of wine is more opaque, and as it were more aeriform, so that the flame is not inspissated. And I also made an experiment on this subject, which was done by taking a wax candle and raising it in a sconce, (using a metal one for the purpose of protecting the body of the candle from the flame, which was to be circumfused,) and placing the sconce in a goblet in which was a small quantity of spirits of wine, and first lighting the candle, and then igniting the spirits of wine; when you might clearly see the radiating and white light of the candle in the midst of the flame of the spirits of wine, which was weak, and approaching to a mere pellucid medium. And in like manner there are often seen in the heavens luminous belts, affording a distinctly visible light of their own, vividly illuminating the darkness of the night, through the substance of which, however, the stars are plainly discernible. And that difference between a star, and the interstellar air is not justly described by the terms rare and dense, that is, by the star being denser, the ether rarer. For generally here among us flame is a body subtler than the air, I mean more expanded, and having in it less matter for the space it occupies, which may probably obtain also in the heavenly bodies. It is a gross mistake, if they really suppose the star

* Aristotle.

to be a part of a sphere in which it is fastened, as it were, by a nail, and the ether a vehicle in which it is carried. For either the body of the star cuts the ether, or the ether itself is carried round in the same rotation. This notion, then, is a mere invention, like that fabric of orbs upon orbs which they describe. For if they revolve otherwise than simultaneously, it is still necessary that the star cut the ether. For that supposed arrangement of adjacent orb, so that the concave of the outer falls in with the convex of the interior orbit, yet on account of the curve of both, the one does not interfere with the other in its revolutions, though differing from its own, has no foundation in fact; since the body of the ether is unbroken, just as that of the air is: and yet because of the great varieties found in each, their various regions are most properly discriminated for the purpose of instruction. Wherefore the sixth question, according to this our explanation of it, is a fit subject for inquiry.

Then follows another question, and not an easy one, with respect to the substance of the stars themselves. We first inquire whether there be other globes or masses of solid and impacted matter besides the earth itself? For the theory is proposed without any extravagance, in our treatise *De Facie in Orbe Lunæ*, that it is not probable, that in the distribution of matter, nature had bound up whatever solid matter there was in the globe of the earth, since there is such a host of other orbs of a sublimated and expanded matter. And Gilbertus carried this theory so extravagantly far, (in which, however, he had several precursors, or rather guides among the ancients,) as to assert not only that the earth, but various other globes, solid and opaque, were dispersed through the expanse of heaven among the luminous globes. And his opinion did not stop here, but he thought that the latter, namely, the sun, and the most resplendent and brightest stars were composed of a certain solid and, though more shining, equilibrate matter; confounding primitive light with the matter of light, which is supposed to be its image, (for he thought our sea too darted forth light to a certain measureable distance;) but Gilbertus admitted the existence of no conglobation, except of crass matter, of which the finer and thinner substances, its envelope, are only effluvia, and lost parts, and to them succeeds a vacuum. Yet the idea respecting the moon, that it is of solid matter, might strike the most accurate and sober-minded inquirer into nature. For it is a refractor, not a vehicle of light, and is, so to speak, devoid of light of its own, and full of vicissitude, all which are properties of solid bodies. For we see the ether itself, and the atmosphere, which are thin bodies, receive, but by no means reverberate the light of the sun, which the moon does. For such is the force of the sun's rays as to traverse and pierce through the clouds of the greatest density, which are of aqueous matter, but through the moon never. But in certain eclipses of the moon there is still visible a light, though an obscure one, in the new and full moon, none, except of the part illuminated by the sun. Moreover, foul and feculent flames, of which kind of substance Empedocles supposed the moon to consist, are no doubt subject to change, but thin inequalities are not fixed in a part, but generally moving. Whereas the spots in the moon are thought to be stationary. To this we add that those spots are discovered by the telescope to have their partial minute inequalities, so that we now find a variety of figures in the moon; and that *Selenography*, a map of the moon projected by Gilbertus, we have lived to see executed by the labours of Galileo and others. And if we can suppose the moon composed of some solid substance analogous to earth, or a sort of sediment of heaven, (for some such notions have been mooted,) we must consider again, whether it be in this respect solitary. For, in the conjunction of Mercury with the sun, there is sometimes visible a spot or partial eclipse. But those dusky spots which are discovered in the Antarctic hemisphere, and are fixed in position, the same as the galaxy, inspire still greater doubts as to opaque orbs, even in the higher regions of the heavens. For in respect that it is alleged as the cause of such appearances, that the heaven is in those places thin, and, so to speak, porous, that is less probable, because a visible diminution and loss of substance could by no means strike our senses from so great a distance, since the rest also of the body of the ether is invisible, and not discernible, except by a comparison with the bodies of the stars. It were perhaps a more probable conjecture to consider them as dark spaces occasioned by want of light; because in that part of heaven there are found fewer stars, just as they are found thicker about the galaxy, so that the one place presents a continuity of light, the other of shade. For in the Antarctic hemisphere the heavenly fires appear to be more distinctly presented than in ours, there being larger stars, though fewer, and wider interstellar spaces. The statements, too, with respect to these spots are scarcely worthy of entire credit, at least no such great pains have been taken in observing, as to authorize us as yet to infer consequences from the observations made. What more affects the present question is, that there may be opaque globes dispersed through ether, which to us are quite imperceptible. For the moon, also, in its first quarter, so far as it is irradiated by the sun, is indeed visible,—in its horns, that is, and the thin rim its circular outline,—but, at full, not at all,—being lost in the general aspect of the rest of ether: and those small wandering satellites discovered by Galileo, if we are to believe the account about Jupiter, are drowned to our view in

the ocean of ether like small and indiscernible islands; and so those small stars, the combination of which forms the milky way, were they placed dispersedly, each by itself, and not grouped into a body, would certainly escape our vision, even as many others do, which sparkle out on clear nights, particularly during winter; so too the nebulous stars, or perforations in the *crib*, are now, by the telescope, distinctly counted; and with the help of the same instrument a certain obscuration of spots, shade, and irregularity is visible in the fountain of light itself, I mean the sun. And if nothing else did, assuredly that gradation in respect of light, descending and reaching from the most brilliant bodies to the most dim and dark, leads to the inference and belief that there are orbs wholly opaque. For there seem to be fewer degrees of approximation between a nebulous and opaque, than between a bright and a nebulous star. Again, man's vision is manifestly cheated and confined. For whatever lies dispersed in the heaven, and has not a conspicuous magnitude, and an intense, strong light, escapes the eye, and makes no difference in the face of heaven. Nor let it strike doubt into the mind of any less informed inquirer, if the question suggests itself, whether globes of consolidated matter can remain pensile? For the earth itself floats pensile in the midst of its circumambient air, the softest of substances, and huge volumes of watery clouds and magazines of hail are long suspended in the fields of air, and are rather precipitated than spontaneously descend, before they begin to be affected by the earth's contiguity. Wherefore Gilbertus has very well noted that heavy bodies, when carried to long distances from the earth, are gradually divested of their motion towards the objects beneath, arising from no other propension of bodies, than that of uniting and conglomerating to the earth, (which is a collection of homogeneous substances,) and of which the influence terminates with its own sphere. For as to what is asserted of a motion to the earth's centre, that would be a sort of *potent nothing* dragging to itself such large masses; whereas body cannot be affected except by body. Wherefore let this inquiry concerning solid and opaque globes, although it appear new, and to common apprehension difficult, be entertained; and let another be associated with it, the old and undecided one, which of the stars give forth a light original and from themselves, and which from the illumination of the sun; the one class appearing to be connatural to the sun, and the other to the moon.

Finally, we understand all investigation concerning the difference of substance among the stars relatively to one another, a multifarious subject, as it seems—since some are red, some leaden, some white, some manifestly always brilliant, others nebulous—to refer to our seventh query. It is another question, whether the stars are real fires, which question, notwithstanding, requires a degree of consideration rightly to comprehend it. For it is one thing to say, that the stars are real fires, and another that the stars, supposing them to be real fires, exercise all the properties and perform all the effects of common fire. Not that we are, therefore, to have recourse to the idea of an abstract and imaginary fire, retaining the name of fire, but rejecting its properties. For our fire, if placed in ether in such a quantity, as the quantity composing a star, would perform different operations from those which are observed on earth; since things acquire far different properties, both from their quantity, and their position or collocation. For the bulkier masses, that is, the homogeneous bodies, which are combined in a body of such quantity as to have analogy to the whole of the universe, acquire cosmical properties, which are nowhere found in their parts. For the ocean, which is the greatest collection of water, ebbs and flows, but marshes and lakes not at all. So in like manner the whole earth remains pendent, a portion of the earth falls. And the position of a body is of great importance, both in its bulkier and smaller portions, on account of the proximity or contiguity of bodies friendly and hostile. Much more, then, must a diversity of action obtain between our fire and that of the stars, because it differs from it not only in the quantity and composition, but also in some degree in substance. For the fire of the stars is pure, uncompounded, and native: whereas ours is degenerate, crippled by its fall like Vulcan precipitated to earth. For if one observe it, we have fire among us as if out of its place, flickering, surrounded with its contraries, poor, and, as it were, begging the alms of nourishment to preserve it, and hastening to disappear. But in heaven fire exists in its true state, dissevered from the encroachment of its contrary, and performing freely, and without disturbance, its appropriate actions. Therefore it was not at all necessary for Patricius, in order to save the pyramidal form of flame as found among us, to insinuate that the higher part of a star might be pyramidal, though the other part, which is visible to us, be globular. For the pyramidal form of fire is incidental to it from the pressure and confinement of the air. Therefore, in flame, the base is fuller, the apex pointed, but in smoke the lower part narrow, the top broadened, and like an inverted pyramid; because air expands to smoke, but compresses fire. It is, therefore, consistent that flame among us should be pyramidal, in heaven globose. In like manner flame among us is a short-lived body, in ether steady and lasting. But even among us flame would remain and subsist in its own form, were it not destroyed by the surrounding substances, which is very apparent in the larger sort of flames. For every portion of flame placed in the midst of flame, pa-

rishes not, but remains unextinguished, the same in quantity, and rapidly ascending heavenwards; but on the sides the pressure takes effect, and from them begins the process of extinction. One way of demonstrating this fact, I mean the interior flame remaining in a spherical figure, and the exterior gradually vanishing and forming a pyramid, is by an experiment of two flames of different colours. There may also be very great difference between the heat of flame in the heavenly bodies and in ours. For the celestial flame expands freely and serenely, as if in its own medium, ours, as if pent up in another, blazes and rages. For all fire hedged about and imprisoned becomes fiercer. In fact, the rays of the fires of heaven themselves, after reaching denser and more impenetrable bodies, lose their mild quality and become more scorching. Wherefore Aristotle ought not to have apprehended Heraclitus's conflagration for his sphere, even although he had determined that the stars were real fires. This question then may also be entertained, subject to this explanation.

Another question follows, Whether the stars are kept alive by due sustentation? and also, whether they are increased, lessened, generated, extinguished? and in fact one of the ancients supposed, from some vulgar observation, that the stars were nourished as fire is, and fed upon the waters, the sea, and the moisture of the earth, and were sustained by their evaporations and exhalations, a notion which seems unworthy to supply matter for any inquiry. For such vapours fall far on this side the height of the stars. Nor is there such a quantity of them as to supply the waters and the land by rains and dews, and besides suffice for repairing so many and so great heavenly orbs, especially as it is evident that the earth and ocean have not suffered diminution in the quantity of liquid for many ages, so that it seems a necessary conclusion that as much is replaced as is absorbed. Nor is the mode of supply so suitable for the heavenly bodies as it is for our fire. For where something perishes and is subtracted, there too something is taken up and assimilated. This species of assimilation resembles the *tartarizations* of salts, and derives its source from the contiguity all round it of opposite or dissimilar substances. But in the consubstantial and interior body of the stars nothing of the kind happens, no more than in the bowels of the earth, but they preserve their substance by the law of identity, not assimilation. But with respect to the exterior surface of the starry bodies, the question is properly enough proposed; whether they remain in one and the same state, or steal from and even taint the surrounding ether? And in this sense we may inquire also respecting the aliment of the stars.

But it is proper here to subjoin the question with respect to the increase and lessening of the stars as bodies, though the phenomena which may occasion uncertainty on the subject are very few.

For, first of all, no instance, or any analogous facts in human experience favour the inquiry; since our globe of earth and water does not seem subject in its mass to any conspicuous augmentation or diminution, but preserves its bulk and quantity. But, it may be said, the stars appear to our view sometimes of larger, sometimes of smaller size. This is true, but that larger or smaller dimension of a star is ascribable either to its proximity or remoteness; or in their apogees and perigees, in the case of the planets; or to the constitution of the medium of vision. So far as this arises from the constitution of the medium, it is easily discriminated, because that changes not the appearance of one star in particular, but of all equally: as happens on winter nights in a keen frost, when the stars appear of increased magnitude, because the vapours of the earth both mount in less quantity and are dissipated more powerfully, and the whole body of the atmosphere is to a certain degree condensed, and approaches an aqueous or crystalline character, which exhibits objects in increased dimension. But if it were some particular intervention of vapours between our vision and some given star, magnifying the appearance of the star, (which we frequently and plainly see happening in the case of the sun, and moon, and other heavenly bodies,) that appearance can neither impose upon us in itself, nor does the star follow and move with the body of the vapour, but is quickly extricated from it, and resumes its usual appearance. But though these things are so, yet since both formerly, in ancient times, and now also in our own age, a great change, much noted and celebrated, has taken place in the star Venus, in its magnitude, colour, and even figure; and since a change which always and regularly attends a given star, and is seen to move about with its body, ought to be considered as necessarily existing in the star itself, and not in the medium of vision; and since, in consequence of the neglect of observations, many remarkable phenomena which take place in heaven are passed by unheeded, and are lost to us: we think it right to entertain this second branch of our question.

Of the same kind is another part of our inquiry, whether, during the long lapse of ages, stars are produced and decomposed? not but that the multitude of facts which invite this question is more copious and sufficient, than on that of their increase, though they be only of one kind. For, as respects the ancient stars, no one in the memory of all ages has remarked the rise of any of them, (except what the ancient Arcadians fabled about the moon,) and none of them has been missed: whereas, with respect to those which are regarded as comets, but of a stellar form and motion, and

in fact, as new stars, we have both witnessed, and learned from the ancients, their appearances and disappearances: while to some they seemed, in the latter, to waste away, to others, to be taken up, as if they had descended towards us in their circuits, and afterwards returned to the higher regions; to others, to be gradually rarefied and dissipated in ether. But the whole of our inquiry respecting the new stars we refer to that place in which we speak of comets.

Another question remains, that with respect to the galaxy, whether the galaxy be a collection of the smallest of the stars, or a combined body and region of the ether of an intermediate substance between that of the ether and the stars. For that theory about exhalations has itself now long exhaled, not without fixing a brand on Aristotle's genius, who had the audacity to put forth such a figment, fastening upon a thing so invariable and fixed, an evanescent and fluctuating character. But an end to this question as proposed by us, seems to be easily attainable, if we are to give credit to the accounts of Galileo, who has arranged that confused luminous appearance into numbered and mapped constellations. For, that the galaxy does not prevent the visibility of those stars which are found within its limits, is not enough to settle the question, nor to incline the matter either way. It only refutes, perhaps, the notion that the galaxy is placed lower than the part of ether containing the stars; for, if this were the case, and the continuous body had also some depth of itself, it is consistent with reason to suppose that our vision would be prevented. And, if it were placed at the same altitude as the stars which are visible in it, there is no reason why stars should not be scattered about in the galaxy itself, not less than in the rest of the ether. Thus we have treated of this question. These six questions, then, refer to the substance of the heavenly bodies; what, namely, is the substance of heaven in general, what of the interstellar air, what of the galaxy, and what of the stars themselves, whether compared with one another, or with our fire, or with their own essence?

But, with respect to the number, magnitude, configuration, and remoteness of the stars, with the exception of the phenomena and historical inquiries, of which we shall speak by-and-by, the problems which philosophy offers are generally simple. With respect to their number, too, there follows another question: whether that be the true number of the stars which is visible, and which has been set down and described by the labours of Hipparchus, and comprised within the plan of the celestial globe. For it is but a barren reason which is assigned for the incalculable number of stars, usually hid, and, as it were, imperceptible, which are commonly seen in winter, particularly in clear nights, namely, that these appearances are not smaller stars, but emanations, scintillæ, and, as it were, darts emitted by known stars; besides, there has been a new enumeration of the host of heaven, by Galileo, not only in that cohort which is distinguished by the name of the milky way, but also amidst the stations and system of the planets. Now, stars become imperceptible either on account of the minuteness of their size, or their capacity, (the term tenuity we do not much approve of, since pure flame is a body of the most subtle tenuity,) or on account of their remoteness and distance. The question with respect to the superflux of stars, created by the production of new ones, we refer to the part which treats of comets.

As regards the magnitude of the stars, the visible magnitude belongs to the general phenomena, the real to the philosophical inquiry comprehended only in our twelfth problem: what are the real dimensions of each star, either discovered by measurement, or, if not, by comparison? for it is easier to discover and demonstrate that the globe of the moon is less than the globe of earth, than that the globe of the moon is a mile round. We must, then, use all trial and exertion to ascertain their exact dimensions; if these cannot be had, we must make use of their comparative.

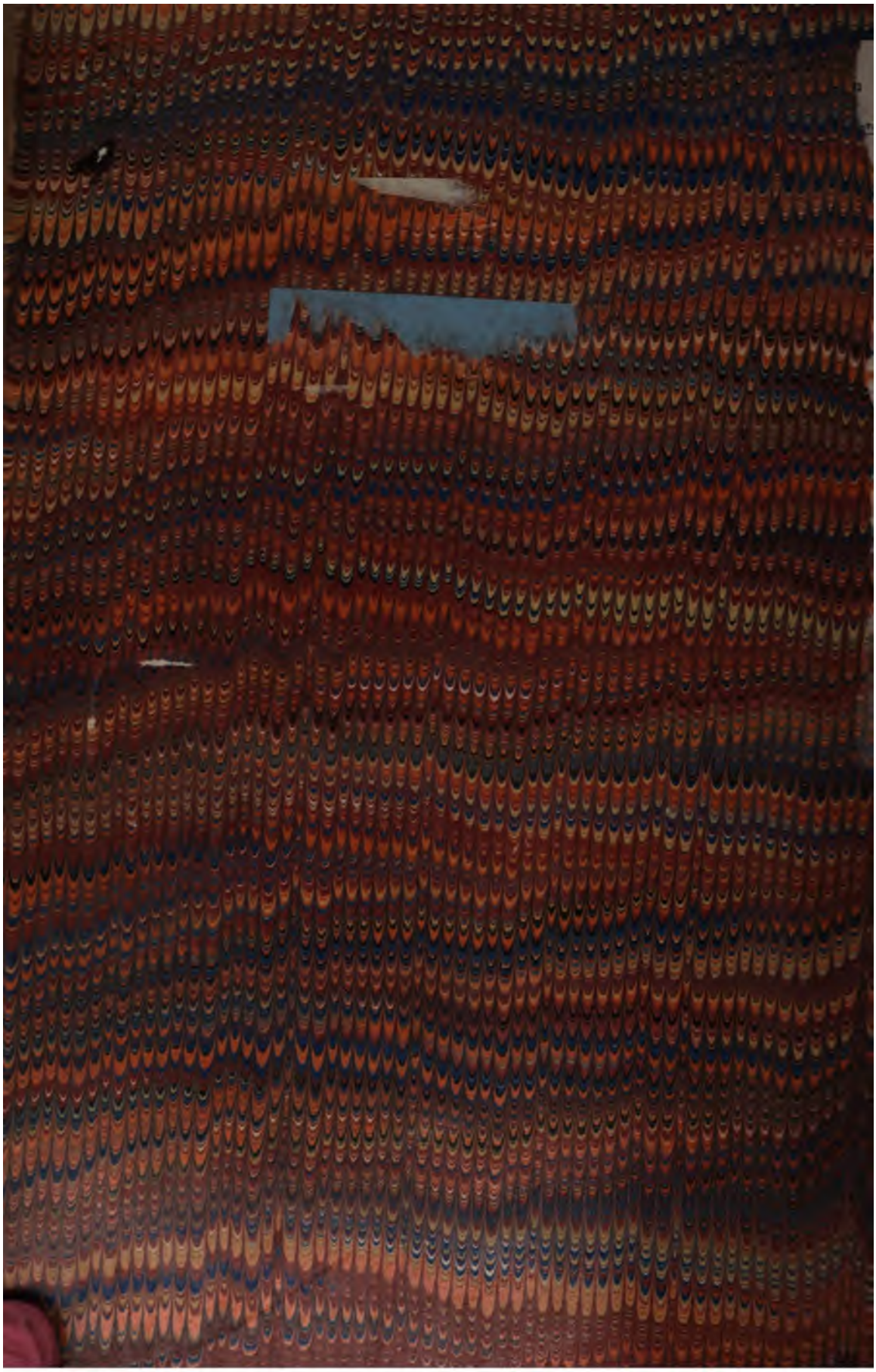
Now, the magnitudes of the stars are either taken and inferred from their eclipses and obscurations, or from the bounds to which they extend their light, and the other properties which each of these bodies, in proportion to their magnitude, emit and propagate; or, lastly, by the harmony of the universe, which confines and limits, by a certain necessity, the parts of the homogeneous bodies. For we must not rest upon the accounts given by astronomers of the bare magnitude of the stars, (though they have laboured in that attempt, seemingly with great and exact minuteness, yet in reality with no little license and temerity;) but must seek, if any present themselves, proofs and evidence more to be trusted to and more genuine. Now, the magnitude and distance of the stars reciprocally indicate each other by the methods of optics: the roots of which science, however, ought to be a little shaken.

The question of the true magnitude of the stars is the twelfth in our enumeration: there follows another respecting the form, whether they be globes, that is, masses of matter of a solid round figure? Now, there are apparently three figures of the stars; spherical and comose, as the sun; spherical and angular, as the stars, (the coma and angles relate here only to aspect, the spherical form only to substance;) spherical only, as the moon. For, no star looks oblong, or triangular, or square, or of any other figure than the above. And, it appears to be the order of nature that the larger accumulations of things, for their own preservation and a truer union of parts, impact themselves into globes.

The fourteenth question relates to distance: what is the true distance of any star in the abyss of heaven? For the distances of the planets, both relatively to one another and to the fixed stars, are consequent upon, or determined by, their motions in the path they describe through the heavens. But, as we have said above concerning the magnitude of the stars, if an exact and directly measured magnitude cannot be had, we must have recourse to their comparative magnitudes:—we give the same precept as to their distance, that if the distance cannot be accurately taken, (for instance, from the earth to Saturn and to Jupiter,) yet, let it be set down at least as certain, that Saturn is of greater altitude than Jupiter. For, the system of the heavens interiorly, that is, the common arrangement of the planets with reference to their heights, is not unchallenged, nor were the opinions that now obtain formerly believed. There is even now a controversy respecting Mercury and Venus, which of them is higher. The distances are found either by their parallaxes, or their eclipses, or their modes of motion, or the differences of their visible magnitude. Other helps must also be obtained for this inquiry, which man's industry will suggest. The question, also, with regard to the thickness or depth of the spheres, is connected with there distances.

W. G. G

THE END OF VOL. II.



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